

## Appendix II. R22 Inventory

### I. List with 40 predefined chemicals included in the definition of the question R22:

“Is the substance a *common component of food (C)* or *structurally closely related (K)* to a *common component of food (C)*?”

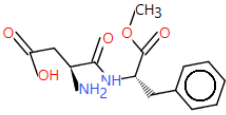
#### Definitions for use with the decision tree:

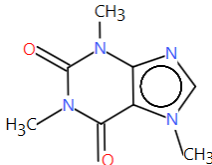
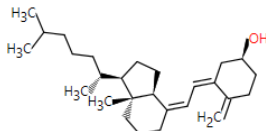
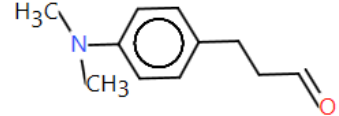
**(C) Common component of food means:** In something as diverse, changing and occasionally uncertain as natural occurrence, it is only possible to define a guideline, not a firm rule. For this decision tree, the term common component of food denotes a substance that has been reported in the recognized literature as occurring in significant quantity (approximately 50 ppm or more) in at least one major food, or in trace quantities at the ppm level or less in several foods, including minor or less frequently consumed foods. The latter include spices, herbs and ethnic specialties. This definition excludes natural or man-made contaminants, and hormones.

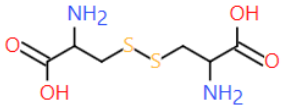
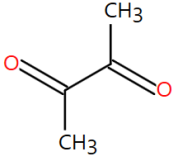
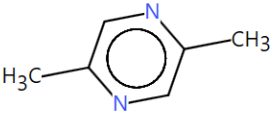
#### (K) Structurally closely related means:

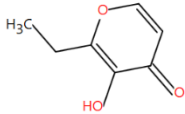
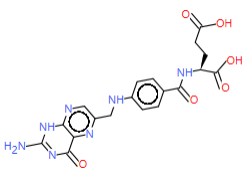
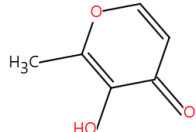
- a member, not more than two carbon atoms removed, in a homologous series, except ethoxy and higher homologous of methoxy compound;
- a primary alcohol and its aldehyde, or either of these and the corresponding carboxylic acid;
- a secondary alcohol and the corresponding ketone;
- structural isomers unlikely to involve steric hindrance of a functional group.
- compounds with the same functional groups, the remainder of the compound being known to be easily and harmlessly metabolized;
- non-sterically hindered esters, thioesters, acetals, ketals and their components.

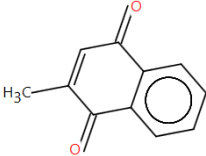
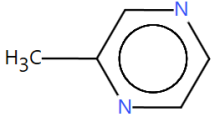
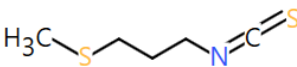
**Table 1. Borrowed from Toxtree 40 Common food components (C) that are accepted by EFSA**

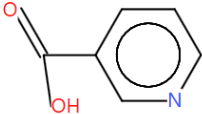
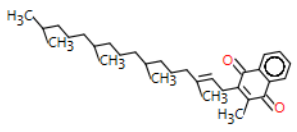
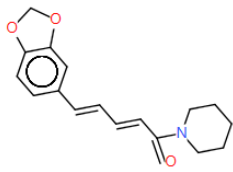
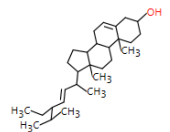
#	CAS #	EC #	Identification Numbers for Flavorings and Food Additives	Chemical name	SMILES	Structure	Reference source
1	22839-47-0	2452613	FEMA number: FEMA GRAS number:	Aspartame	<chem>COC(=O)C(Cc1ccccc1)NC(=O)C(N)CC(O)=O</chem>	 The image shows the chemical structure of Aspartame, which is a dipeptide derivative. It consists of a benzene ring attached to a chiral carbon atom. This carbon is also bonded to a hydrogen atom, a methyl ester group (-OCH3), and an amide group (-NH-). The amide nitrogen is bonded to another chiral carbon atom, which is part of a succinyl group (a five-membered ring containing two carbonyl groups and one hydroxyl group).	<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ASPARTAME">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ASPARTAME</a>

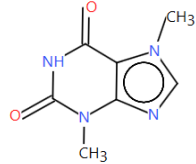
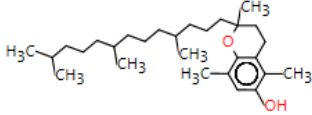
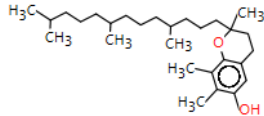
			JECFA number: FL No: CoE No:				
2	58-08-2	200362 1	FEMA number: 2224 FEMA GRAS number: 3 JECFA number: FL No: 16.016 CoE No: 11741	Caffeine	<chem>CN1C(=O)N(C)c2ncn(C)c2C1=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CAFFEINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CAFFEINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB002100">https://foodb.ca/compounds/FDB002100</a>  [2,137]
3	1406-16-2	215797 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Vitamin D	<chem>CC(C)CCCC(C)C1CCC2C(/CCCC12C)=C/C=C1/CC(O)CCC1=C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMIND3">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMIND3</a>  <a href="https://foodb.ca/compounds/FDB021586">https://foodb.ca/compounds/FDB021586</a>  [3,152]
4	377084-04-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-[4-(Dimethylamino)phenyl]propanal	<chem>CN(C)c1ccc(CCC=O)cc1</chem>		UNDER DEVELOPMENT

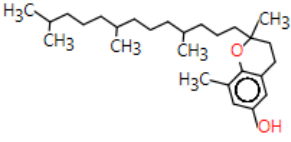
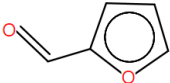
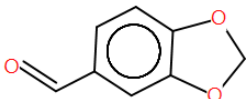
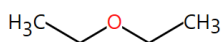
5	923-32-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cystine; DL-Cystine	<chem>NC(CSSCC(N)C(O)=O)C(O)=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CYSTINEDL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CYSTINEDL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  [4]
6	431-03-8	207069 8	FEMA number: 2370 FEMA GRAS number: 3 JECFA number: 408 FL No: 07.052 CoE No: 752	2,3- Butanedion; Diacyl	<chem>CC(=O)C(C)=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIACETYL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIACETYL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  [5,138]
7	123-32-0	204618 3	FEMA number: 3272 FEMA GRAS number: 5 JECFA number: 766 FL No: 14.020 CoE No: 2210	2,5- Dimethyl- pyrazine	<chem>Cc1cnc(C)cn1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRAZINE25">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRAZINE25</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/DB013954">https://foodb.ca/compounds/DB013954</a>  [6,139]

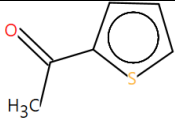
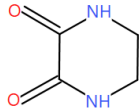
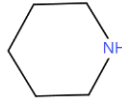
8	4940-11-8	2255825	FEMA number: 3487 FEMA GRAS number: 10 JECFA number: 1481 FL No: 07.047 CoE No: 692	2-Ethyl-3-hydroxy-4-pyrone	CCC1OC=CC(=O)C=1O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMALTOL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMALTOL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  [7,140]
9	59-30-3	2004190	FEMA number: 2656 FEMA GRAS number: 3 JECFA number: 1480 FL No: 07.014 CoE No: 148	(2S)-2-[[4-[(2-Amino-4-oxo-1,4-dihydropteridin-6-yl)methyl]amino}phenyl]formamido]pentanedioic acid Folic acid	NC1Nc2ncc(CNc3ccc(cc3)C(=O)NC(CCC(O)=O)C(O)=O)nc2C(=O)N=1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FOLICACID">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FOLICACID</a>  <a href="https://foodb.ca/compounds/FDB014504">https://foodb.ca/compounds/FDB014504</a>  [8,141]
10	118-71-8	2042718	FEMA number: 2656 FEMA GRAS number: 3 JECFA number: 1480 FL No: 07.014 CoE No: 148	2-Ethyl-3-hydroxy-4-pyrone; Maltol	CC1OC=CC(=O)C=1O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MALTOL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MALTOL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB002712">https://foodb.ca/compounds/FDB002712</a>  [9,142]

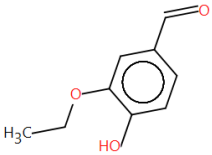
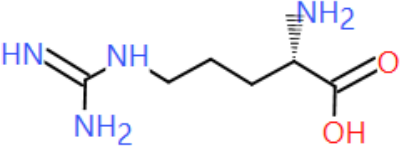
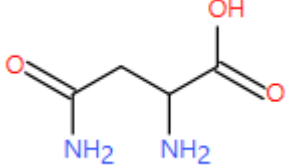
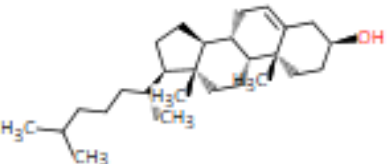
11	58-27-5	200372 6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-1,4- naphthalenedi one; Menadione	<chem>CC1=CC(=O)c2ccccc2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB000953">https://foodb.ca/compounds/FDB000953</a>  [10,143]
12	109-08-0	203645 8	FEMA number: 3309 FEMA GRAS number: 5, 25 JECFA number: 761 FL No: 14.027 CoE No: 2270	2-Methyl- pyrazine	<chem>Cc1cncn1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB011112">https://foodb.ca/compounds/FDB011112</a> [11,144]
13	505-79-3	208020 3	FEMA number: 3312 FEMA GRAS number: 5, 25 JECFA number: 1564 FL No: 12.030 CoE No: 2326	1- Isothiocyanat o-3- (methylsulfan yl)propane	<chem>CSCCCN=C=S</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIOPROPYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIOPROPYLISOTHIOCYANATE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB012744">https://foodb.ca/compounds/FDB012744</a> [12,145]

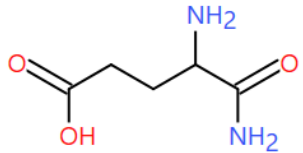
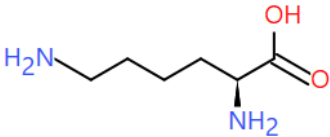
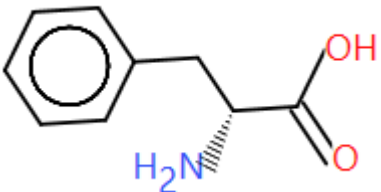
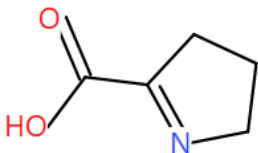
14	59-67-6	2004410	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Carboxylpyridine; Nicotinic acid; Niacin;	<chem>OC(=O)c1cccn1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=NIACIN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=NIACIN</a> [13,146]
15	81818-54-4	2798339	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-3-(3,7,11,15-tetramethylhexadec-2-en-1-yl)naphthalene-1,4-dione	<chem>CC(C)CCCC(C)CCCC(C)CCCC(C)=CCC1=C(C)C(=O)c2ccccc2C1=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMINK">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMINK</a> <a href="https://foodb.ca/compounds/FDB012357">https://foodb.ca/compounds/FDB012357</a> [14]
16	94-62-2	2023480	FEMA number: 2909 FEMA GRAS number: 3 JECFA number: 1600 FL No: 14.003 CoE No: 492	Piperine; Bioperine; 1-Piperoylpiperidine	<chem>O=C(C=CC=Cc1ccc2OC(=O)c2c1)N1CCCCC1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERINE</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB000449">https://foodb.ca/compounds/FDB000449</a> [15,147, 234]
17	83-48-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3beta-Stigmasta-5,22-dien-3-ol	<chem>CCC(C=CC(C)C1CCC2C3CC=C4CC(O)CCC4(C)C3CCC12C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB001936">https://foodb.ca/compounds/FDB001936</a> [16,148]

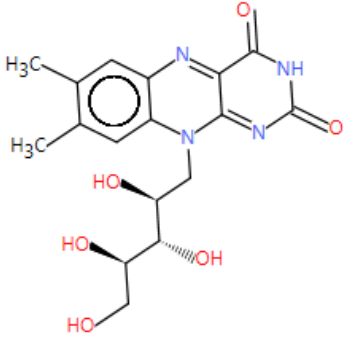
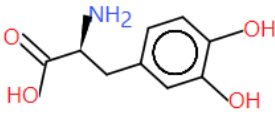
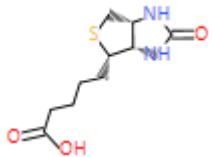
18	83-67-0	201494 2	FEMA number: 3591 FEMA GRAS number: 11 JECFA number: FL No: 16.032 CoE No:	Theobromine ; 1H-Purine- 2,6- dione,_3,7- dihydro-3,7- dimethyl-;	<chem>CN1C(=O)NC(=O)c2c1n cn2C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?et=FoodSubstances&amp;id=THEOBROMINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?et=FoodSubstances&amp;id=THEOBROMINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB000455">https://foodb.ca/compounds/FDB000455</a> [17,149]
19	1406-66- 2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	dl- Tocopherol mixture; dl- Tocopherol mixture, natural (alpha, beta, gamma and delta) mixed tocopherols Tocopherols	<chem>CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2c(C)c(O)cc(C)c2O1</chem>		<a href="https://foodb.ca/compounds/FDB002431">https://foodb.ca/compounds/FDB002431</a> [18,150]
20	7616-22- 0	231523 4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	γ- Tocopherol; 2,7,8- Trimethyl-2- (4,8,12- trimethyltridecyl)-3,4- dihydro-2H- chromen-6- ol;	<chem>CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2cc(O)c(C)c(C)c2O1</chem>		<a href="https://foodb.ca/compounds/FDB002431">https://foodb.ca/compounds/FDB002431</a> [19]

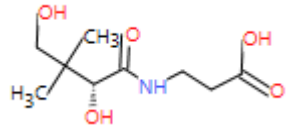
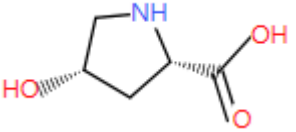
21	119-13-1	204299 0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	d-Tocopherol; 2,8-Dimethyl-2-(4,8,12-trimethyltridecyl)-3,4-dihydro-2H-chromen-6-ol;	<chem>CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2cc(O)cc(C)c2O1</chem>		[20,151]
22	98-01-1	202627 7	FEMA number: 2489 FEMA GRAS number: 3 JECFA number: 450 FL No: 13.018 CoE No: 2014	Furfural	<chem>O=Cc1ccco1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURAL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURAL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB004219">https://foodb.ca/compounds/FDB004219</a> [21,153]
23	120-57-0	204409 7	FEMA number: 2911 FEMA GRAS number: 3, 25 JECFA number: 896 FL No: 05.016 CoE No: 104	Piperonal	<chem>O=Cc1ccc2OCOc2c1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERONAL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERONAL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB010553">https://foodb.ca/compounds/FDB010553</a>  [22, 68, 90, 153]
24	60-29-7	200467 2	FEMA number: FEMA GRAS number:	Diethylether	<chem>CCOCC</chem>		<a href="https://foodb.ca/compounds/FDB004482">https://foodb.ca/compounds/FDB004482</a>  [23]

			JECFA number: FL No: CoE No:				
25	88-15-3	201804 6	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.040 CoE No: 11728	2-Acetyl thiophene	CC(=O)c1cccs1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB011134">https://foodb.ca/compounds/FDB011134</a>  [24,25]
26	13092-86-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Diketopiperazine	O=C1NCCNC1=O		[25]
27	110-89-4	203813 0	FEMA number: 2908 FEMA GRAS number: 3 JECFA number: 1607 FL No: 14.010 CoE No: 675	Piperidine	C1CCNCC1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERIDINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERIDINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB012644">https://foodb.ca/compounds/FDB012644</a>  [26,153]

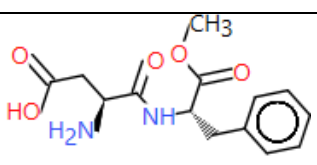
28	121-32-4	204464 7	FEMA number: 2464 FEMA GRAS number: 3 JECFA number: 893 FL No: 05.019 CoE No: 108	Ethylvanillin	CCOc1cc(C=O)ccc1O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLVANILLIN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLVANILLIN</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [27]
29	157-06-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>D</i> -Arginine; ( <i>R</i> )-2-Amino-5-guanidinopen-tanoic acid	NC(CCCNC(N)=N)C(O)=O		<a href="https://foodb.ca/compounds/FDB023167">https://foodb.ca/compounds/FDB023167</a>  [166]
30	70-47-3	200735 9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>L</i> -Asparagine; Aspartamic acid; (2 <i>S</i> )-2,4-Diamino-4-oxobutanoic acid	NC(CC(N)=O)C(O)=O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ASPARAGINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ASPARAGINE</a>  [156]
31	57-88-5	200353 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cholesterol; Cholest-5-en-3β-ol	CC(C)CCCC(C)CCCC2C3CC=C4CC(O)CCC4(C)C3CCCC12C		[319]

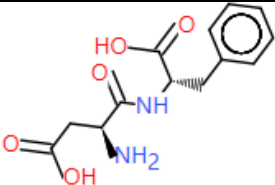
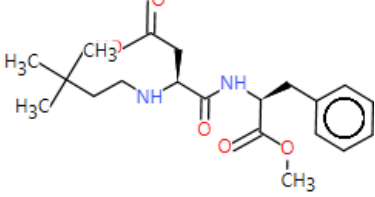
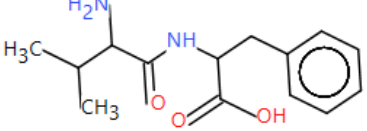
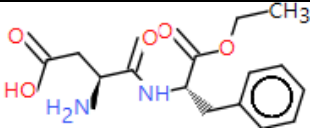
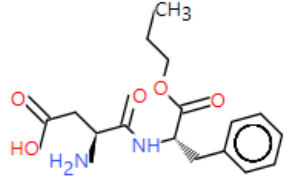
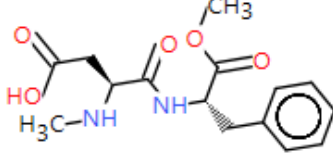
32	328-48-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Isoglutamine; 4,5-Diamino-5-oxopentanoic acid;  <i>DL</i> -Isoglutamine	<chem>C(CC(=O)O)C(C(=O)N)N</chem>		UNDER DEVELOPMENT
33	923-27-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>D</i> -Lysine; (2 <i>R</i> )-2,6-Diaminohexanoic acid	<chem>NCCCCC(N)C(O)=O</chem>		<a href="https://foodb.ca/compounds/FDB023163">https://foodb.ca/compounds/FDB023163</a> [191]
34	150-30-1		FEMA number: 3726 FEMA GRAS number: 13 JECFA number: 1432 FL No: 17.017 CoE No: 10488	<i>DL</i> -Phenylalanine; 2-Amino-3-phenylpropanoic acid	<chem>NC(Cc1ccccc1)C(O)=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENYLALANINEDL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENYLALANINEDL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [194]
35	2139-03-9		FEMA number: FEMA GRAS number: JECFA number:	3,4-Dihydro-2 <i>H</i> -pyrrole-5-carboxylic acid; 1-Pyrroline-2-carboxylic acid;	<chem>C1CC(=NC1)C(=O)O</chem>		<a href="https://foodb.ca/compounds/FDB024129">https://foodb.ca/compounds/FDB024129</a> [222]

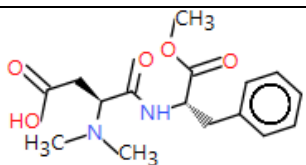
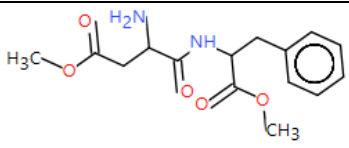
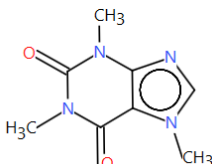
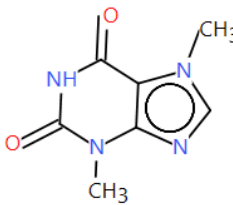
			FL No: CoE No:	Pyrroline-5-carboxylate; 1-Pyrroline-2-carboxylate			
36	83-88-5	201507 1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Riboflavine; Vitamin B2	<chem>Cc1cc2N=C3C(=O)NC(=O)N=C3N(CC(O)C(O)C(O)CO)c2cc1C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=RIBOFLAVIN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=RIBOFLAVIN</a> <a href="https://foodb.ca/compounds/FDB012160">https://foodb.ca/compounds/FDB012160</a> [161]
37	59-92-7	200445 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>L</i> -Dopa zwitterion; (2 <i>S</i> )-2-Azaniumyl-3-(3,4-dihydroxyphenyl)-propanoate	<chem>N[C@@H](Cc1ccc(O)c(O)c1)C(O)=O</chem>		[201]
38	58-85-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>d</i> -Biotin; Vitamin H; Vitamin B7;	<chem>OC(=O)CCCCC1SCC2NC(=O)NC12</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BIOTIN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BIOTIN</a> [163]

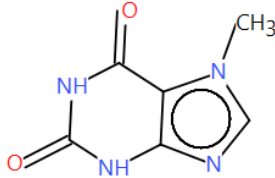
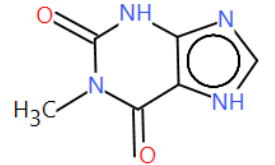
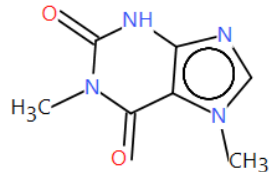
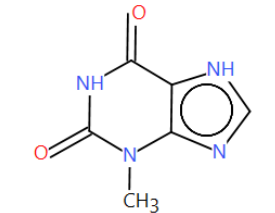
39	79-83-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>D</i> -Pantothenic acid; Vitamin B5;	<chem>CC(C)(CO)C(O)C(=O)NCCC(=O)O</chem>		<a href="https://foodb.ca/compounds/FDB030151">https://foodb.ca/compounds/FDB030151</a> [164]
40	51-35-4	2000919	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>L</i> -Hydroxyproline; (2 <i>S</i> ,4 <i>R</i> )-4-hydroxypyrrolidine-2-carboxylic acid	<chem>OC1CNC(C1)C(=O)O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYPROLINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYPROLINE</a> [165]

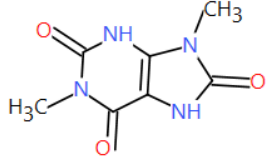
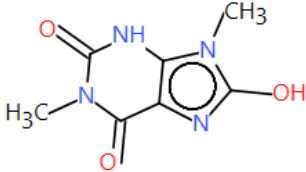
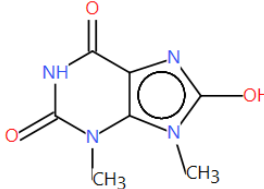
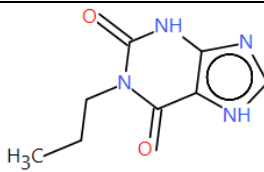
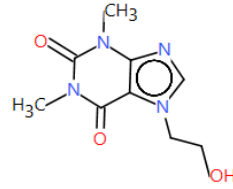
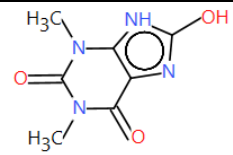
**Table 2. Found analogues (K) closely structurally similar to each of the 40 Common food components (C) accepted by EFSA**

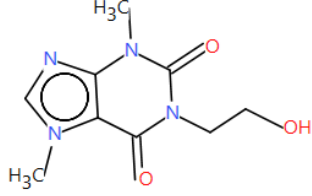
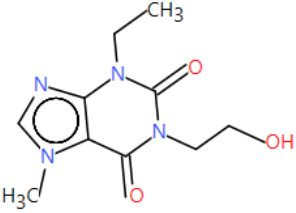
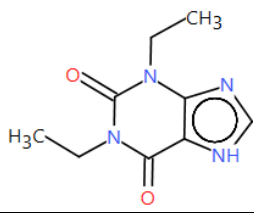
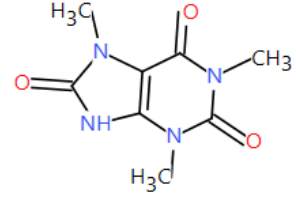
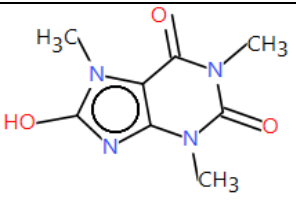
#	CAS #	EC #	Identification Numbers for Flavorings and Food Additives	Chemical name	SMILES	Structure	Reference source
1	22839-47-0	2452613	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Aspartame	<chem>COC(=O)C(Cc1ccccc1)NC(=O)C(N)CC(=O)O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ASPARTAME">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ASPARTAME</a>

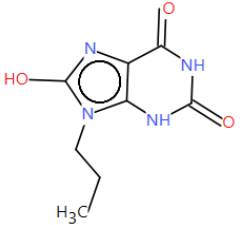
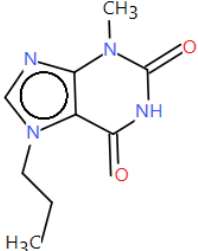
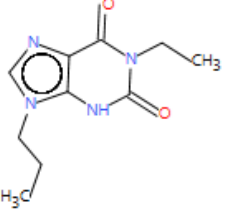
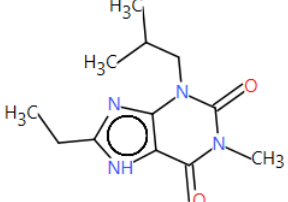
1.1	13433-09-5	2365573	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Aspartyl-phenylalanine (Aspartame metabolite)	<chem>NC(CC(O)=O)C(=O)NC(Cc1ccccc1)C(O)=O</chem>		[241]
1.2	165450-17-9	6054088	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Neotame	<chem>COC(=O)C(Cc1ccccc1)NC(=O)C(CC(O)=O)NCCC(C)(C)C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=NEOTAME">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=NEOTAME</a> [28,242]
1.3	3918-92-1	3918-92-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	L-Valyl-L-phenylalanine	<chem>CC(C)C(N)C(=O)NC(Cc1ccccc1)C(O)=O</chem>		<a href="https://foodb.ca/compounds/FDB112136">https://foodb.ca/compounds/FDB112136</a> [29]
1.4	22839-83-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ethyl aspartylphenylalaninate	<chem>CCOC(=O)C(Cc1ccccc1)NC(=O)C(N)CC(O)=O</chem>		UNDER DEVELOPMENT
1.5			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(3S)-3-Amino-4-oxo-4-[[[(2S)-1-oxo-3-phenyl-1-propoxypropan-2-yl]amino]butanoic acid	<chem>CCCOC(=O)C(Cc1ccccc1)NC(=O)C(N)CC(O)=O</chem>		UNDER DEVELOPMENT
1.6	261943-16-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(2S)-2-[(N-Methyl-L-α-aspartyl)amino]-3-phenylpropionic acid 1-methyl ester	<chem>CNC(CC(O)=O)C(=O)NC(Cc1ccccc1)C(=O)OC</chem>		UNDER DEVELOPMENT

1.7			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(3 <i>S</i> )-3-(Dimethylamino)-4-[[ <i>(2S)</i> -1-methoxy-1-oxo-3-phenylpropan-2-yl]amino]-4-oxobutanoic acid	<chem>COC(=O)C(Cc1ccccc1)NC(=O)C(CC(O)=O)N(C)C</chem>		UNDER DEVELOPMENT
1.8			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Methyl 3-amino-4-[[ <i>(1-methoxy-1-oxo-3-phenyl-2-propanyl)</i> amino]-4-oxobutanoate	<chem>COC(=O)CC(C(=O)NC(Cc1ccccc1)C(=O)OC)N</chem>		UNDER DEVELOPMENT
2	58-08-2	200362 1	FEMA number: 2224 FEMA GRAS number: 3 JECFA number: FL No: 16.016 CoE No: 11741	<b>Caffeine</b>	<chem>CN1C(=O)N(C)c2ncn(C)c2C1=O</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CAFFEINE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CAFFEINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB002100">https://foodb.ca/compounds/FDB002100</a>  [2,137]
2.1	83-67-0	201494 2	FEMA number: 3591 FEMA GRAS number: 11 JECFA number: FL No: 16.032 CoE No:	Theobromine	<chem>CN1C(=O)NC(=O)c2c1ncn2C</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=THEOBROMINE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=THEOBROMINE</a>  <a href="https://eur-lex.europa.eu/legal-">https://eur-lex.europa.eu/legal-</a>

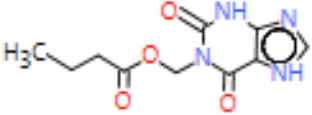
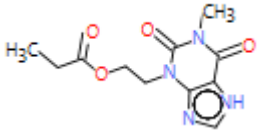
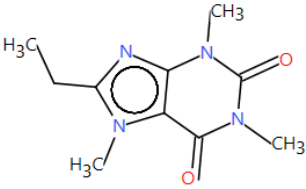
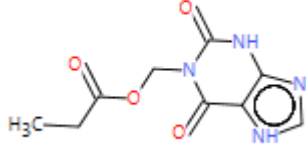
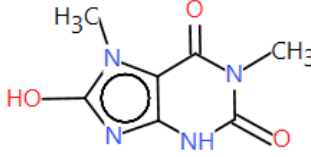
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							[31,149]
2.2	552-62-5	2090190	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Heteroxanthine	<chem>Cn1cnc2NC(=O)NC(=O)c12</chem>		<a href="https://foodb.ca/compounds/FDB001978">https://foodb.ca/compounds/FDB001978</a> [32]
2.3	6136-37-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Methylxanthine	<chem>CN1C(=O)Nc2nc[nH]c2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB027885">https://foodb.ca/compounds/FDB027885</a> [33]
2.4	611-59-6	2102719	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,7-Dimethylxanthine	<chem>CN1C(=O)Nc2ncn(C)c2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB022714">https://foodb.ca/compounds/FDB022714</a> [34]
2.5	1076-22-8	2140581	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Methylxanthine	<chem>CN1C(=O)NC(=O)c2[nH]cnc12</chem>		<a href="https://foodb.ca/compounds/FDB022724">https://foodb.ca/compounds/FDB022724</a> [35]

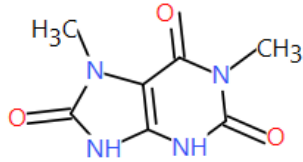
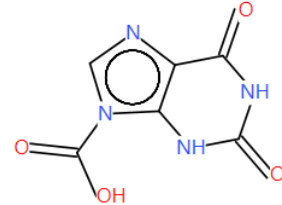
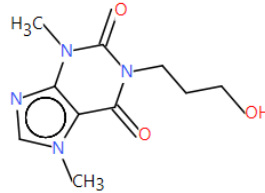
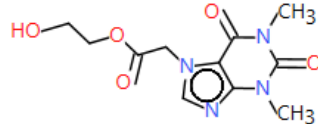
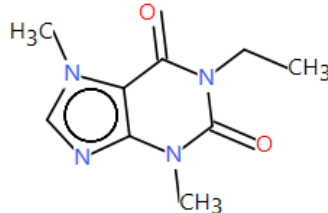
2.6	55441-62-8 Stabil tautomeric form		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,9-Dimethyl- 2,6,8- trihydroxypurine	<chem>CN1C(=O)NC2N(C)C(=O)NC=2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB022804">https://foodb.ca/compounds/FDB022804</a> [36]
2.7	55441-62-8	2596390	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,9-Dimethyluric acid	<chem>CN1C(=O)Nc2c(nc(O)n2C)C1=O</chem>		<a href="https://foodb.ca/compounds/FDB022804">https://foodb.ca/compounds/FDB022804</a> [37]
2.8	55441-63-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3,9-Dimethyluric acid	<chem>CN1C(=O)NC(=O)c2nc(O)n(C)c12</chem>		UNDER DEVELOPMENT
2.9	104285-82-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Propylxanthine	<chem>CCCN1C(=O)Nc2nc[nH]c2C1=O</chem>		UNDER DEVELOPMENT
2.10	519-37-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Etofylline	<chem>CN1C(=O)N(C)c2ncn(CC)O)c2C1=O</chem>		UNDER DEVELOPMENT
2.11	944-73-0	2134101	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,3-Dimethyluric acid	<chem>CN1C(=O)N(C)c2[nH]c(O)nc2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB022712">https://foodb.ca/compounds/FDB022712</a> [38]

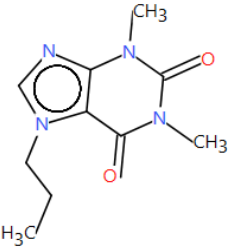
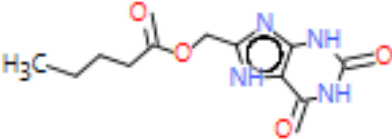
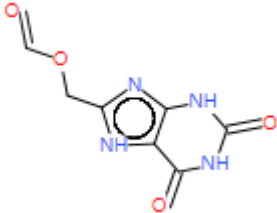
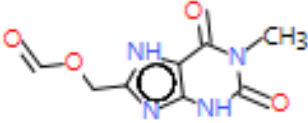
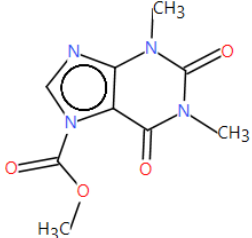
2.12	1507-14-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Oxyethyltheobromine	<chem>CN1C(=O)N(CCO)C(=O)c2c1ncn2C</chem>		UNDER DEVELOPMENT
2.13		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<chem>CCN1C(=O)N(CCO)C(=O)c2c1ncn2C</chem>	<chem>Cn1cnc2NC(=O)N(O)C(=O)c12</chem>		UNDER DEVELOPMENT
2.14	5169-95-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,3-Diethylxanthine	<chem>CCN1C(=O)N(CC)c2nc[nH]c2C1=O</chem>		UNDER DEVELOPMENT
2.15	5415-44-1 Stabil tautomeric form of CAS 7464-93-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,3,7-Trimethyluric acid	<chem>CN1C2=C(NC1=O)N(C(=O)N(C2=O)C)C</chem>		<a href="https://foodb.ca/compounds/FDB030187">https://foodb.ca/compounds/FDB030187</a>  [39]
2.16	7464-93-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,3,7-Trimethyl-7,9-dihydro-1H-purine-2,6,8(3H)-trione	<chem>CN1C(=O)N(C)c2nc(O)n(C)c2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB030187">https://foodb.ca/compounds/FDB030187</a>  UNDER DEVELOPMENT

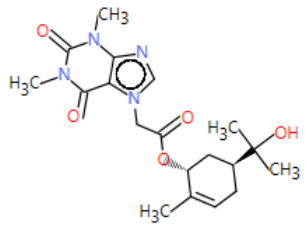
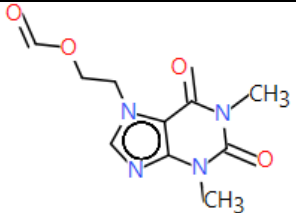
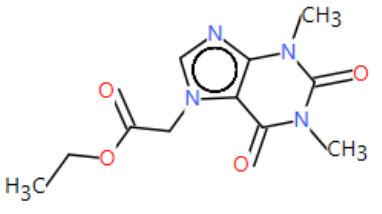
2.17			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>CCCn1c(O)nc2C(=O)NC(=O)Nc12</chem>		UNDER DEVELOPMENT
2.18	55242-64-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Methyl-7-propylxanthine	<chem>CCCn1cnc2N(C)C(=O)NC(=O)c12</chem>		UNDER DEVELOPMENT
2.19			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>CCCn1cnc2C(=O)N(CC)C(=O)Nc12</chem>		UNDER DEVELOPMENT
2.20	132560-07-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Xanthine, 8-ethyl-3-isobutyl-1-methyl-	<chem>CCc1nc2N(CC(C)C)C(=O)N(C)C(=O)c2[nH]1</chem>		UNDER DEVELOPMENT

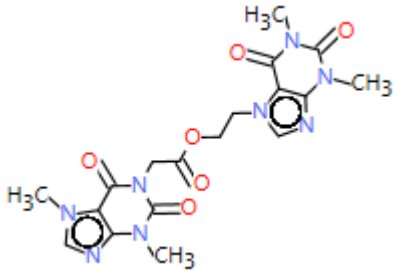
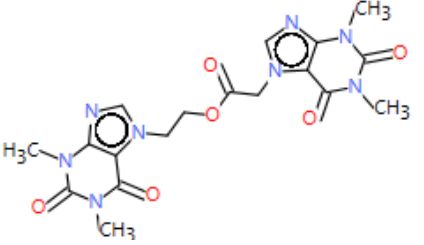
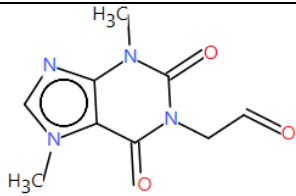
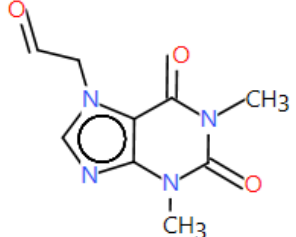
2.21	132560-08-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Xanthine, 3-isobutyl-1-methyl-8-propyl-	<chem>CCCC1nc2N(CC(C)C)C(=O)N(C)C(=O)c2[nH]1</chem>		UNDER DEVELOPMENT
2.22	132560-10-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Xanthine, 3,8-diisobutyl-1-methyl-	<chem>CC(C)CN1C(=O)N(C)C(=O)c2[nH]c(CC(C)C)nc12</chem>		UNDER DEVELOPMENT
2.23	5439-51-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Theophylline-8-acetic acid	<chem>CN1C(=O)N(C)c2nc(CC(=O)O)=O[nH]c2C1=O</chem>		UNDER DEVELOPMENT
2.24		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>CCCC(=O)Oc1nc2NC(=O)NC(=O)c2[nH]1</chem>		UNDER DEVELOPMENT
2.25	41078-01-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Ethylxanthine	<chem>CCN1C(=O)NC(=O)c2nc[nH]c12</chem>		UNDER DEVELOPMENT

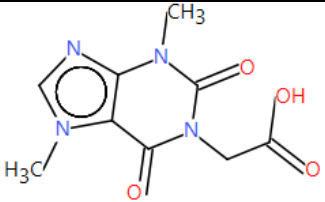
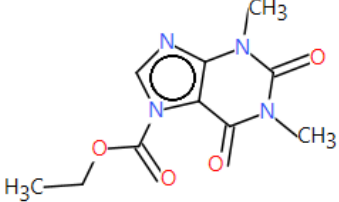
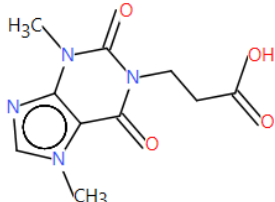
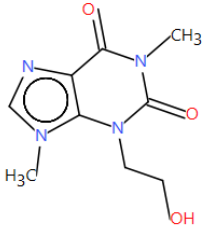
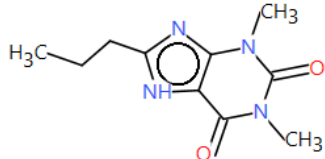
2.26			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>CCCC(=O)OCN1C(=O)Nc2nc[nH]c2C1=O</chem>		UNDER DEVELOPMENT
2.27			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>CCC(=O)OCCN1C(=O)N(C)C(=O)c2[nH]cnc12</chem>		UNDER DEVELOPMENT
2.28	5426-50-6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	8-Ethyl-1,3,7-trimethyl-1H-purine-2,6(3H,7H)-dione	<chem>CCc1nc2N(C)C(=O)N(C)C(=O)c2n1C</chem>		UNDER DEVELOPMENT
2.29			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>CCC(=O)OCN1C(=O)NC2N=CNC=2C1=O</chem>		UNDER DEVELOPMENT
2.30	33868-03-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,7-Eimethyl-7,9-dihydro-1H-purine-2,6,8(3H)-trione	<chem>CN1C(=O)Nc2nc(O)n(C)c2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB027886">https://foodb.ca/compounds/FDB027886</a> UNDER DEVELOPMENT

2.31	33868-03-0 Stabilizer tautomeric form of 2.32	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,7-Dimethyluric acid	<chem>CN1C(=O)NC2NC(=O)N(C)C=2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB027886">https://foodb.ca/compounds/FDB027886</a> [40]
2.32	71965-22-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,2,3,6-Tetrahydro-2,6-dioxo-9H-purine-9-carboxylic acid	<chem>OC(=O)N1CNC2C(=O)NC(=O)Nc12</chem>		UNDER DEVELOPMENT
2.33	59413-14-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-(3-Hydroxypropyl)theobromine	<chem>CN1C(=O)N(CCCO)C(=O)c2c1ncn2C</chem>		UNDER DEVELOPMENT
2.34	61379-38-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Hydroxyethyl 1,2,3,6-tetrahydro-1,3-dimethyl-2,6-dioxo-7H-purine-7-acetate	<chem>CN1C(=O)N(C)c2ncn(CC(=O)OCCO)c2C1=O</chem>		UNDER DEVELOPMENT
2.35	39832-36-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Ethyltheobromine	<chem>CCN1C(=O)N(C)c2ncn(C)c2C1=O</chem>		UNDER DEVELOPMENT

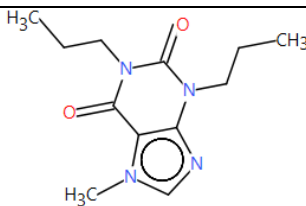
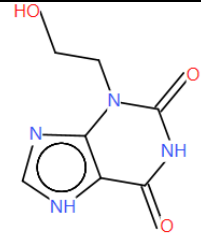
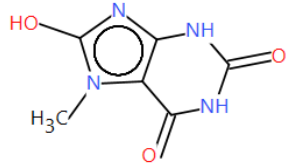
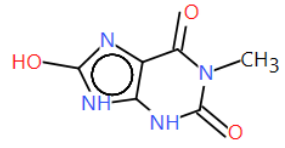
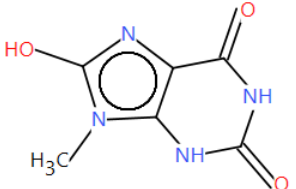
2.36	27760-74-3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Theophylline, n-propyl derivative	<chem>CCCn1cnc2N(C)C(=O)N(C)C(=O)c12</chem>	 Theophylline core with a propyl group attached to the nitrogen at position 7.	UNDER DEVELOPMENT
2.37		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>CCCCC(=O)OCc1nc2NC(=O)NC(=O)c2[nH]1</chem>	 Theophylline core with a pentyl group attached to the nitrogen at position 7.	UNDER DEVELOPMENT
2.38		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>O=COCc1nc2NC(=O)NC(=O)c2[nH]1</chem>	 Theophylline core with a benzoyl group attached to the nitrogen at position 7.	UNDER DEVELOPMENT
2.39		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>CN1C(=O)Nc2nc(COC=O)[nH]c2C1=O</chem>	 Caffeine core with a benzoyl group attached to the nitrogen at position 7.	UNDER DEVELOPMENT
2.40	65029-15-4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Methyl 1,3-dimethyl-2,6-dioxo-1,2,3,6-tetrahydro-7H-purine-7-carboxylate	<chem>COC(=O)n1cnc2N(C)C(=O)N(C)C(=O)c12</chem>	 Caffeine core with a methyl ester group attached to the nitrogen at position 7.	UNDER DEVELOPMENT

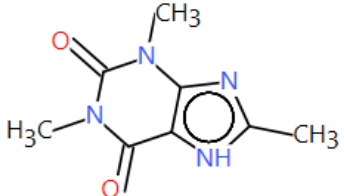
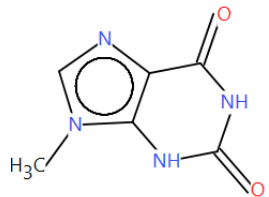
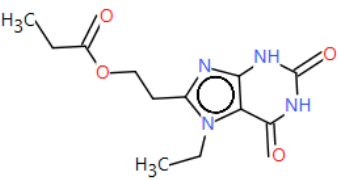
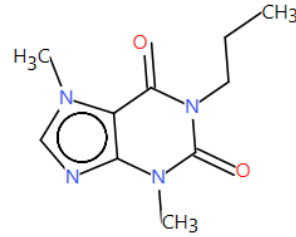
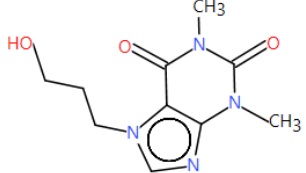
2.41	101691-39-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Theophylline-7-acetic acid ester of d,l-trans-sobrerol	<chem>CN1C(=O)N(C)c2ncn(CC(=O)O[C@@H]3C[C@H](CC=C3C)C(C)(C)O)c2C1=O</chem>		UNDER DEVELOPMENT
2.42		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-(1,3-Dimethyl-2,6-dioxopurin-7-yl)ethyl formate	<chem>CN1C(=O)N(C)c2ncn(CCOC=O)c2C1=O</chem>		UNDER DEVELOPMENT
2.43	7029-96-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ethyl (1,3-dimethyl-2,6-dioxo-1,2,3,6-tetrahydro-7H-purin-7-yl)acetate	<chem>CCOC(=O)Cn1cnc2N(C)C(=O)N(C)C(=O)c12</chem>		UNDER DEVELOPMENT

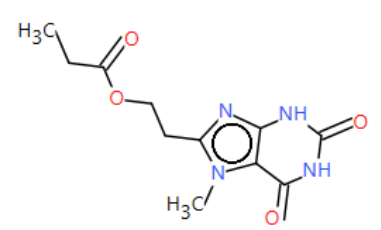
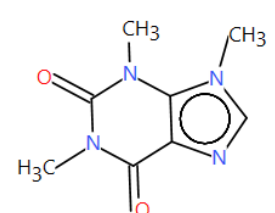
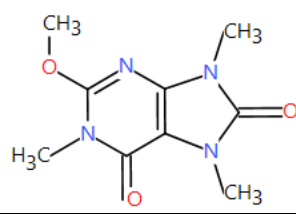
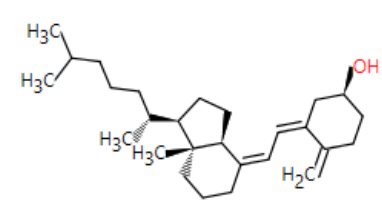
2.44	169563-64-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-(1,3-Dimethyl-2,6-dioxopurin-7-yl)ethyl 2-(3,7-dimethyl-2,6-dioxopurin-1-yl)acetate	<chem>CN1C(=O)N(C)c2ncn(CCOC(=O)CN3C(=O)N(C)c4ncn(C)c4C3=O)c2C1=O</chem>		UNDER DEVELOPMENT
2.45	169563-63-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7H-Purine-7-acetic acid, 1,2,3,6-tetrahydro-1,3-dimethyl-2,6-dioxo-, 2-(1,3-dimethyl-2,6-dioxo-1,2,3,6-tetrahydro-7H-purin-7-yl)ethyl ester	<chem>CN1C(=O)N(C)c2ncn(CCOC(=O)Cn3cnc4N(C)C(=O)N(C)C(=O)c34)c2C1=O</chem>		UNDER DEVELOPMENT
2.46		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Coffein-al	<chem>CN1C(=O)N(CC=O)C(=O)c2c1ncn2C</chem>		UNDER DEVELOPMENT
2.47	5614-53-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Theophylline-7-acetaldehyde	<chem>CN1C(=O)N(C)c2ncn(CC=O)c2C1=O</chem>		UNDER DEVELOPMENT

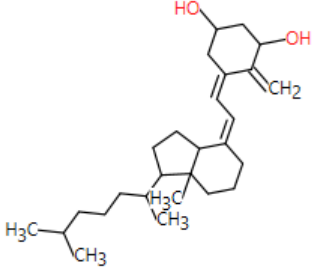
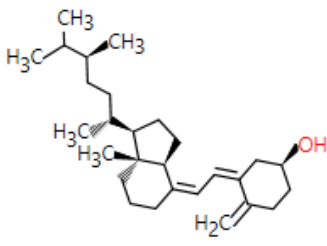
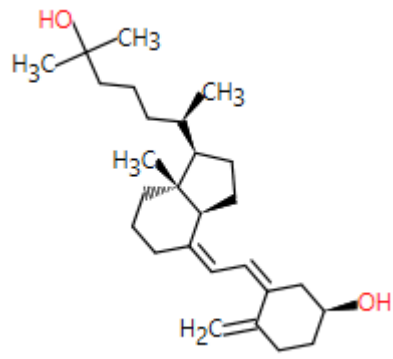
2.48	5614-56-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Theobromineacetic acid	<chem>CN1C(=O)N(CC(O)=O)C(=O)c2c1ncn2C</chem>		UNDER DEVELOPMENT
2.49	101774-91-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,3-Dimethyl-2,6-dioxo-1,2,3,6-tetrahydro-purine-7-carboxylic acid ethyl ester	<chem>CCOC(=O)n1cnc2N(C)C(=O)N(C)C(=O)c12</chem>		UNDER DEVELOPMENT
2.50	5815-65-6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-(3,7-Dimethyl-2,6-dioxo-2,3,6,7-tetrahydro-1H-purin-1-yl)propanoic acid	<chem>CN1C(=O)N(CCC(O)=O)C(=O)c2c1ncn2C</chem>		UNDER DEVELOPMENT
2.51	87866-16-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Xanthine, 1,9-dimethyl-3-(2-hydroxyethyl)-	<chem>CN1C(=O)N(CCO)c2c(ncn2C)C1=O</chem>		UNDER DEVELOPMENT
2.52	2850-41-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	8-Propyltheophylline	<chem>CCCc1nc2N(C)C(=O)N(C)C(=O)c2[nH]1</chem>		UNDER DEVELOPMENT

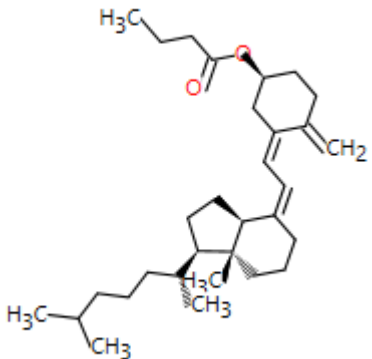
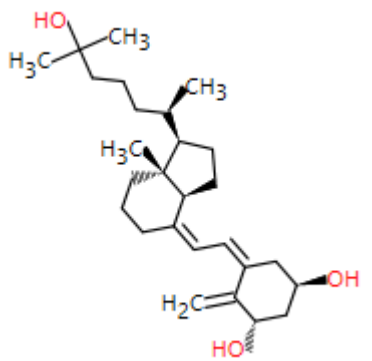
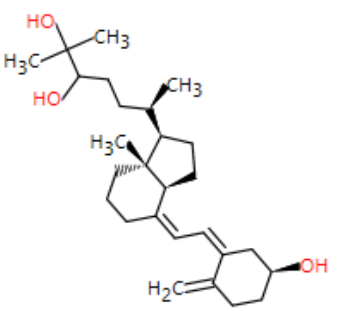
2.53	33073-01-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,9-Dimethylxanthine	<chem>CN1C(=O)Nc2c(ncn2C)C1=O</chem>		UNDER DEVELOPMENT
2.54	652-37-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Acefylline	<chem>CN1C(=O)N(C)c2ncn(CC(O)=O)c2C1=O</chem>		UNDER DEVELOPMENT
2.55	31542-47-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Xanthine, 3-(2-hydroxyethyl)-1-methyl-	<chem>CN1C(=O)N(CCO)c2nc[nH]c2C1=O</chem>		UNDER DEVELOPMENT
2.56	32865-30-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,3,7-Triethylxanthine	<chem>CCN1C(=O)N(CC)c2ncn(CC)c2C1=O</chem>		UNDER DEVELOPMENT
2.57	31542-62-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,3-Dipropylxanthine	<chem>CCCN1C(=O)N(CCC)c2nc[nH]c2C1=O</chem>		UNDER DEVELOPMENT

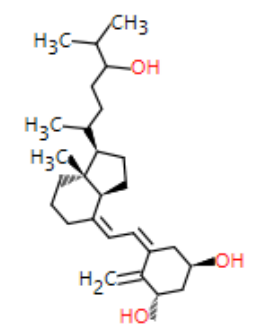
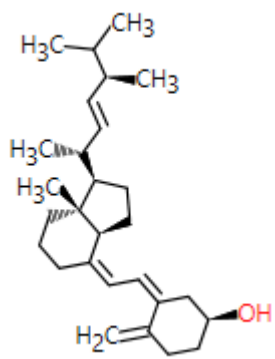
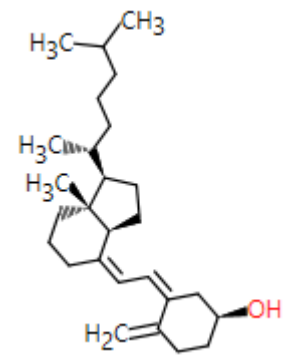
2.58	31542-63-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,3-Dipropyl-7-methylxanthine	<chem>CCCN1C(=O)N(CCC)c2ncn(C)c2C1=O</chem>		UNDER DEVELOPMENT
2.59	31542-69-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Xanthine, 3-(2-hydroxyethyl)-	<chem>OCCN1C(=O)NC(=O)c2[nH]cnc12</chem>		UNDER DEVELOPMENT
2.60	612-37-3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7-Methyluric acid	<chem>Cn1c(O)nc2NC(=O)NC(=O)c12</chem>		<a href="https://foodb.ca/compounds/FDB027890">https://foodb.ca/compounds/FDB027890</a>
2.61	708-79-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Methyluric acid	<chem>CN1C(=O)Nc2[nH]c(O)nc2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB023107">https://foodb.ca/compounds/FDB023107</a>
2.62	55441-71-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	9-Methyluric acid	<chem>Cn1c(O)nc2C(=O)NC(=O)Nc12</chem>		<a href="https://foodb.ca/compounds/FDB022772">https://foodb.ca/compounds/FDB022772</a>

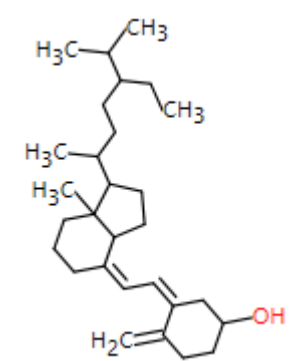
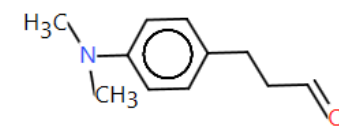
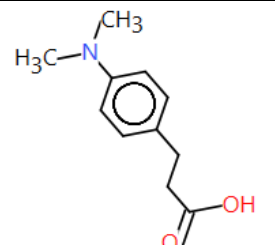
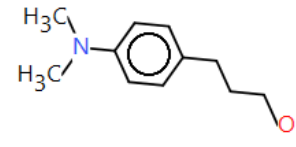
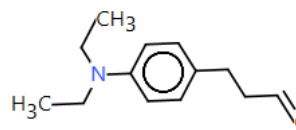
2.63	830-65-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	8- Methyltheophylli ne	<chem>CN1C(=O)N(C)c2nc(C)[nH]c2C1=O</chem>		UNDER DEVELOPMENT
2.64	1198-33-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	9-Methylxanthine	<chem>Cn1cnc2C(=O)NC(=O)Nc12</chem>		UNDER DEVELOPMENT
2.65		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>CCC(=O)OCCc1nc2NC(=O)NC(=O)c2n1CC</chem>		UNDER DEVELOPMENT
2.66	63906-63-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Propyl theobromine	<chem>CCCN1C(=O)N(C)c2ncn(C)c2C1=O</chem>		UNDER DEVELOPMENT
2.67	23146-04-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7-(3- Hydroxypropyl)th eophylline	<chem>CN1C(=O)N(C)c2ncn(CC(O)C)C1=O</chem>		UNDER DEVELOPMENT

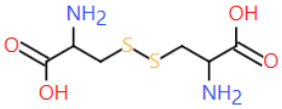
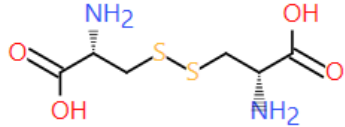
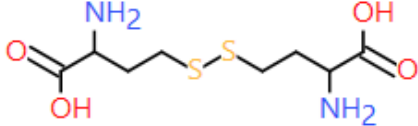
2.68	22052-01-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:		<chem>CCC(=O)OCCc1nc2NC(=O)NC(=O)c2n1C</chem>		UNDER DEVELOPMENT
2.69	519-32-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Isocaffeine	<chem>CN1C(=O)N(C)c2c(ncn2C)C1=O</chem>		UNDER DEVELOPMENT
2.70	51168-26-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Methyliberine; 2-Methoxy-1,7,9-trimethylpurine-6,8-dione	<chem>CN1C2=C(N=C(N(C2=O)C)OC)N(C1=O)C</chem>		[303]
3	1406-16-2	2157972	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Vitamin D	<chem>CC(C)CCCC(C)C1CCC2C(/CCCC12C)=C/C=C1/CC(O)CCC1=C</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMIND3">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMIND3</a> <a href="https://foodb.ca/compounds/FDB021586">https://foodb.ca/compounds/FDB021586</a> [3,154]

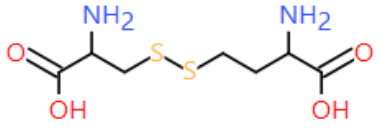
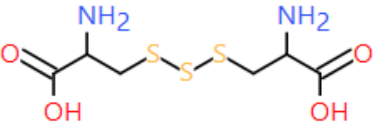
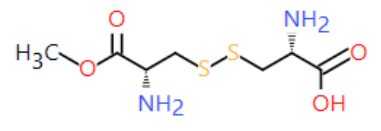
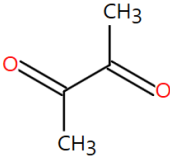
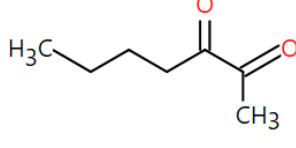
3.1	41294-56-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Alfacalcidol (metabolite of vitamin D3)	<chem>CC(C)CCCC(C)C1CCC2C(CCCC12C)=CC=C1CC(O)CC(O)C1=C</chem>	 <p>The structure shows a complex polycyclic steroid-like core with a long side chain containing two methyl groups and a terminal dihydroxyethylidene group.</p>	[243]
3.2	511-28-4	2081275	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Vitamin D4; 22,23-Dihydroergocalciferol	<chem>CC(C)C(C)CCC(C)C1CC2C(CCCC12C)=C\C=C1CC(O)CCC1=C</chem>	 <p>The structure features a complex polycyclic steroid-like core with a long side chain containing two methyl groups and a terminal dihydroxyethylidene group.</p>	[244]
3.3	19356-17-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Calcifediol	<chem>CC(CCCC(C)(C)O)C1CC2C1(CCCC2=CC=C3CC(CCC3=C)O)C</chem>	 <p>The structure shows a complex polycyclic steroid-like core with a long side chain containing two methyl groups and a terminal dihydroxyethylidene group.</p>	<a href="https://foodb.ca/compounds/FDB021782">https://foodb.ca/compounds/FDB021782</a> [41]

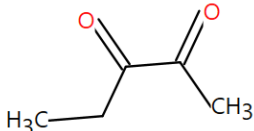
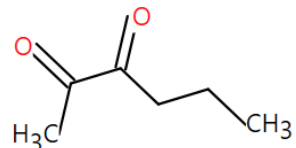
3.4	31316-20-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Vitamin D3 butyrate	<chem>CCCC(=O)OC1CCC(=C)\C(C1)=C/C=C1CCCC2(C)C(CCC12)C(C)CCCC(C)C</chem>		UNDER DEVELOPMENT
3.5	32222-06-3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No	Rocaltrol; Calcitriol (Metabolite of vitamin D3)	<chem>CC(CCCC(C)(C)O)C1CC2C1(CCCC2=CC=C3CC(CC(C3=C)O)O)C</chem>		[245]
3.6	40013-87-4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Dihydroxycholecalciferol; 24,25-Dihydroxy VD3 (Metabolite of vitamin D3)	<chem>CC(CCC(O)C(C)(C)O)C1CCC2(C1)C(CCCC12)=C\C=C1CC(O)CCC1=C</chem>		[246]

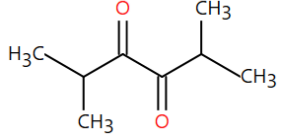
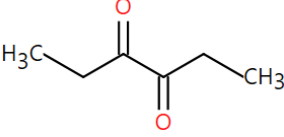
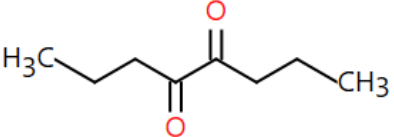
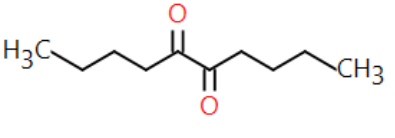
3.7	57333-96-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Tacalcitol (an analogue of active vitamin D3 used in the treatment of skin diseases )	<chem>CC(C)C(CCC(C)C1CCC2C1(CCCC2=CC=C3CC(C(C(=C)O)O)C)O</chem>		[247]	
3.8	50-14-6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ergocalciferol; Vitamin D2	<chem>CC(C)C(C)C=CC(C)C1C CC2C1(CCCC2=CC=C3C C(CCC3=C)O)C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMIND2">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMIND2</a> <a href="https://foodb.ca/compounds/FDB012811">https://foodb.ca/compounds/FDB012811</a>	[42]
3.9	67-97-0	2006732	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cholecalciferol; Vitamin D3	<chem>CC(CCCC(C)C)C1CCC2C1(CCC/C2=C\C=C/3\CC(CCC3=C)O)C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMIND3">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMIND3</a> <a href="https://foodb.ca/compounds/FDB021586">https://foodb.ca/compounds/FDB021586</a>	[221]

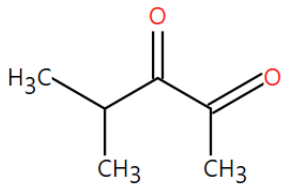
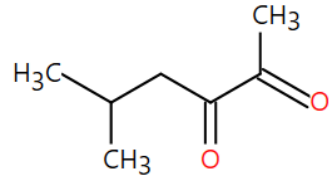
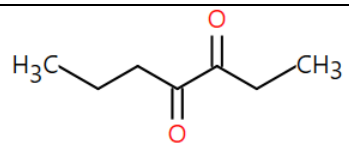
3.10			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No	Sitocalciferol; Vitamin D5	<chem>CCC(CCC(C)C1CCC\2C1(CCC/C2=C\C=C/3\CC(CCC3=C)O)C)C(C)C</chem>		[248]
4	377084-04-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-[4-(Dimethylamino)phenyl]propanal	<chem>CN(C)c1ccc(CCC=O)cc1</chem>		UNDER DEVELOPMENT
4.1.	73718-09-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-[4-(Dimethylamino)phenyl]propanoic acid	<chem>CN(C)C1=CC=C(C=C1)C(CC(=O)O)</chem>		UNDER DEVELOPMENT
4.2.	85665-76-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-[4-(Dimethylamino)phenyl]propan-1-ol	<chem>CN(C)C1=CC=C(C=C1)C(CCO)</chem>		UNDER DEVELOPMENT
4.3.	1781650-64-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-[4-(Diethylamino)phenyl]propanal	<chem>CCN(CC)C1=CC=C(C=C1)CCC=O</chem>		UNDER DEVELOPMENT

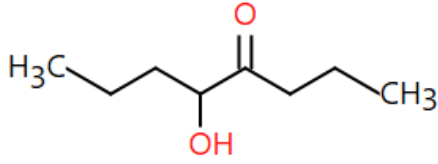
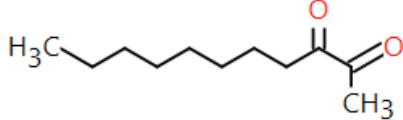
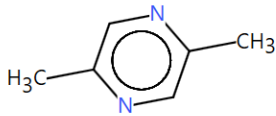
5	923-32-0	213094 5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>Cystine; DL-Cystine</b>	<chem>NC(CSSCC(N)C(O)=O)C(O)=O</chem>		<a href="https://www.hfpaexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CYSTINEDL">https://www.hfpaexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CYSTINEDL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  [4]
5.1	56-89-3	200296 3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cystine; L-Cystine	<chem>NC(CSSCC(N)C(O)=O)C(O)=O</chem>		<a href="https://www.hfpaexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CYSTINEL">https://www.hfpaexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CYSTINEL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  [249, 250]
5.2	462-10-2	207323 8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	DL-Homocystine	<chem>NC(CCSSCCC(N)C(O)=O)C(O)=O</chem>		UNDER DEVELOPMENT

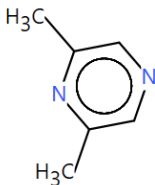
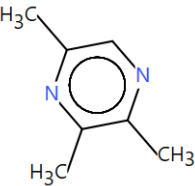
5.3	4985-47-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Homocysteine-cysteine disulfide	<chem>NC(CCSSCC(N)C(O)=O)C(O)=O</chem>		UNDER DEVELOPMENT
5.4	14172-54-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Thiocystine (a naturally occurring compound)	<chem>NC(CSSCC(N)C(O)=O)C(O)=O</chem>		[251]
5.5	82356-84-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cystine, methyl ester	<chem>COC(=O)C(CSSCC(C(=O)O)N)N</chem>		UNDER DEVELOPMENT
6	431-03-8	2070698	FEMA number: 2370 FEMA GRAS number: 3 JECFA number: 408 FL No: 07.052 CoE No: 752	<b>2,3-Butanedione; Diacetyl</b>	<chem>CC(=O)C(C)=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIACETYL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIACETYL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  [5,138]
6.1	96-04-8	2024725	FEMA number: 2543 FEMA GRAS number: 3, 25 JECFA number: 415 FL No: 07.064 CoE No: 2044	2,3-Heptanedione	<chem>CCCCCC(=O)C(C)=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEPTANEDIONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEPTANEDIONE</a>  <a href="https://eur-lex.europa.eu/legal-">https://eur-lex.europa.eu/legal-</a>

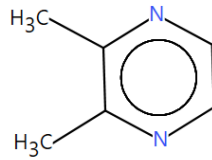
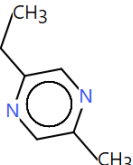
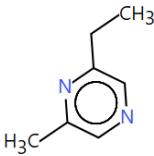
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6.2	600-14-6	6051435	FEMA number: 2841 FEMA GRAS number: 3 JECFA number: 410 FL No: 07.060 CoE No: 2039	2,3-Pentanedione	CCC(=O)C(C)=O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTANEDIONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTANEDIONE</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB008229">https://foodb.ca/compounds/FDB008229</a> [44,252]
6.3	3848-24-6	2233508	FEMA number: 2558 FEMA GRAS number: 3, 25 JECFA number: 412 FL No: 07.018 CoE No: 152	2,3-Hexanedione	CCCC(=O)C(C)=O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEXANEDIONE23">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEXANEDIONE23</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB008070">https://foodb.ca/compounds/FDB008070</a> [45,252]

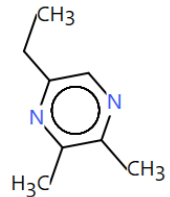
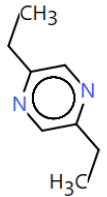
6.4	4388-87-8	8649945	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,5-Dimethyl-3,4-hexanedione	<chem>CC(C)C(=O)C(=O)C(C)C</chem>		UNDER DEVELOPMENT
6.5	4437-51-8	2246517	FEMA number: 3168 FEMA GRAS number: 4 JECFA number: 413 FL No: 07.077 CoE No: 2255	3,4-Hexanedione	<chem>CCC(=O)C(=O)CC</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEXANEDIONE34">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEXANEDIONE34</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [46,252]
6.6	5455-24-3		FEMA number: 4533 FEMA GRAS number: 24 JECFA number: 2037 FL No: 07.071 CoE No: 2141	4,5-Octanedione	<chem>CCCC(=O)C(=O)CCC</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=OCTANEDIONE45">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=OCTANEDIONE45</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [47]
6.7	5579-73-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5,6-Decanedione	<chem>CCCCCC(=O)C(=O)CCCC</chem>		UNDER DEVELOPMENT

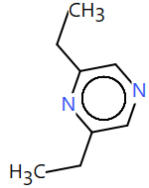
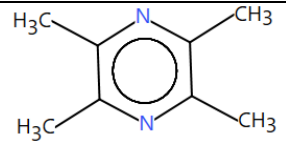
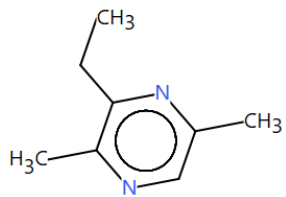
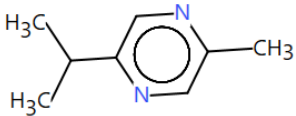
6.8	7493-58-5	2313284	FEMA number: 2730 FEMA GRAS number: 3 JECFA number: 411 FL No: 07.063 CoE No: 2043	Acetyl isobutyryl; 4-Methylpentane-2,3-dione	CC(C)C(=O)C(C)=O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPENTANEDIONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPENTANEDIONE</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB008172">https://foodb.ca/compounds/FDB008172</a>  [48,252]
6.9	13706-86-0	2372418	FEMA number: 3190 FEMA GRAS number: 4, 25 JECFA number: 414 FL No: 07.093 CoE No: 11148	Acetyl isovaleryl; 5-Methyl-2,3-hexanedione	CC(C)CC(=O)C(C)=O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLHEXANEDIONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLHEXANEDIONE</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB008223">https://foodb.ca/compounds/FDB008223</a>  [49,252]
6.10	13706-89-3	2372423	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3,4-Heptanedione	CCCC(=O)C(=O)CC		UNDER DEVELOPMENT

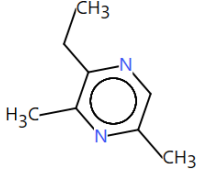
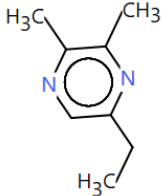
6.11	496-77-5	207830 4	FEMA number: 2587 FEMA GRAS number: 3, 25 JECFA number: 416 FL No: 07.067 CoE No: 2045	5-Hydroxy-4- octanone	CCCC(C(=O)CCC)O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYOCTANONE54">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYOCTANONE54</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [252, 254]
6.12	7493-59-6	231330 5	FEMA number: 3090 FEMA GRAS number: 3 JECFA number: 417 FL No: 07.021 CoE No: 155	Undecane-2,3- dione	CCCCCCCCC(=O)C(=O)C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=UNDECADIONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=UNDECADIONE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [252, 255]
7	123-32-0	204618 3	FEMA number: 3272 FEMA GRAS number: 5 JECFA number: 766 FL No: 14.020 CoE No: 2210	2,5-Dimethyl- pyrazine	Cc1cnc(C)cn1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRAZINE25">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRAZINE25</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB0139">https://foodb.ca/compounds/FDB0139</a>

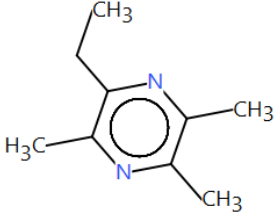
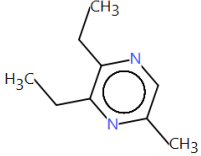
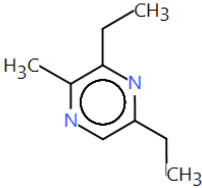
							<a href="#">54</a> [6,139, 256, 258]
7.1	108-50-9	203589 4	FEMA number: 3273 FEMA GRAS number: 5 JECFA number: 767 FL No: 14.021 CoE No: 2211	2,6- Dimethylpyrazine	<chem>Cc1cncc(C)n1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRAZINE26">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRAZINE26</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB004391">https://foodb.ca/compounds/FDB004391</a>  [50,256, 258]
7.2	14667-55-1	238712 0	FEMA number: 3244 FEMA GRAS number: 4, 25 JECFA number: 774 FL No: 14.019 CoE No: 735	2,3,5- Trimethylpyrazine	<chem>Cc1cn(C)c(C)n1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB008527">https://foodb.ca/compounds/FDB008527</a>  [51,258]

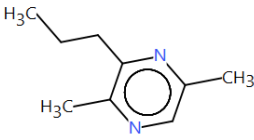
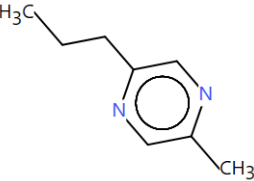
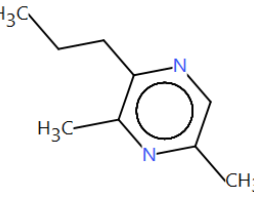
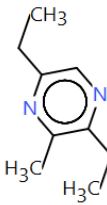
7.3	5910-89-4	2276300	FEMA number: 3271 FEMA GRAS number: 5, 25 JECFA number: 765 FL No: 14.050 CoE No: 11323	2,3-Dimethylpyrazine	Cc1nccnc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRAZINE23">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRAZINE23</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB010958">https://foodb.ca/compounds/FDB010958</a> [52,256, 258]
7.4	13360-64-0	2364166	FEMA number: 3154 FEMA GRAS number: 4, 25 JECFA number: 770 FL No: 14.017 CoE No: 728	2-Ethyl-5-methylpyrazine	CCc1cnc(C)n1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLME THYLPYRAZINE25">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLME THYLPYRAZINE25</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB004429">https://foodb.ca/compounds/FDB004429</a> [53,256, 258]
7.5	13925-03-6	2376920	FEMA number: 3919 FEMA GRAS number: 19 JECFA number: 769 FL No: 14.114 CoE No: 11331	2-Ethyl-6-methylpyrazine	CCc1cncc(C)n1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLME THYLPYRAZINE26">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLME THYLPYRAZINE26</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB004429">https://foodb.ca/compounds/FDB004429</a> [53,256, 258]

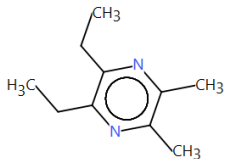
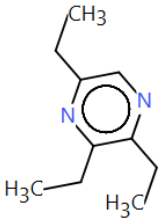
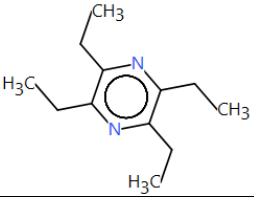
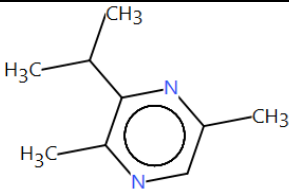
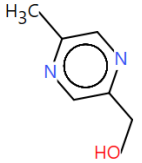
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7.6	15707-34-3		FEMA number: 4434 FEMA GRAS number: 24 JECFA number: 2126 FL No: 14.170 CoE No:	2,3-Dimethyl-5-ethylpyrazine	CCc1cnc(C)c(C)n1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLDIMETHYLPYRAZINE523">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLDIMETHYLPYRAZINE523</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB000923">https://foodb.ca/compounds/FDB000923</a> [55,256]
7.7	13238-84-1		FEMA number: FEMA GRAS number: JECFA number: FL No: 14.097 CoE No: 11306	2,5-Diethylpyrazine	CCc1cnc(CC)cn1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB015754">https://foodb.ca/compounds/FDB015754</a> [56,256]

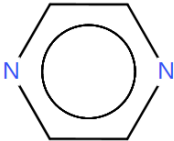
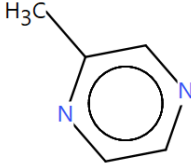
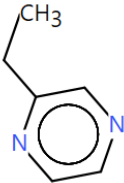
7.8	13067-27-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,6-Diethylpyrazine	CCc1cncc(CC)n1		<a href="https://foodb.ca/compounds/FDB015755">https://foodb.ca/compounds/FDB015755</a>  [57,256]
7.9	1124-11-4	2143912	FEMA number: 3237 FEMA GRAS number: 4, 25 JECFA number: 780 FL No: 14.018 CoE No: 734	2,3,5,6-Tetramethylpyrazine	Cc1nc(C)c(C)nc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TETRAMETHYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TETRAMETHYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB015495">https://foodb.ca/compounds/FDB015495</a>  [58,256 258]
7.10	13360-65-1	2364171	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.111 CoE No:	3-Ethyl-2,5-dimethylpyrazine	CCc1nc(C)cnc1C		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB020022">https://foodb.ca/compounds/FDB020022</a>  [59,256,258]
7.11	13925-05-8		FEMA number: 3554 FEMA GRAS number: 11, 25 JECFA number: 772 FL No: 14.026 CoE No: 2268	2-Isopropyl-5-methylpyrazine	CC(C)c1cnc(C)n1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLISOPROPYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLISOPROPYLPYRAZINE</a>

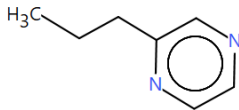
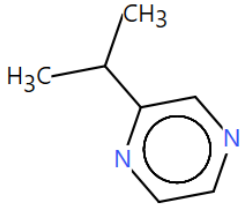
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7.12	13925-07-0		FEMA number: 3150 FEMA GRAS number: 4 JECFA number: 776 FL No: 14.024 CoE No:2245	2-Ethyl-3,5-dimethylpyrazine	CCc1ncc(C)nc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLDIMETHYLPYRAZINE326">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLDIMETHYLPYRAZINE326</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB020021">https://foodb.ca/compounds/FDB020021</a> [61,256,258]
7.13	15707-34-3		FEMA number: 4437 FEMA GRAS number: 24 JECFA number: 2126 FL No: 14.170 CoE No:	2,3-Dimethyl-5-ethylpyrazine	CCc1cnc(C)c(C)n1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLDIMETHYLPYRAZINE523">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLDIMETHYLPYRAZINE523</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

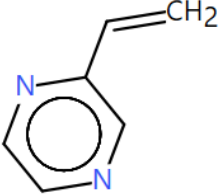
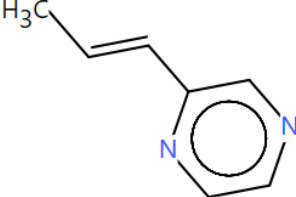
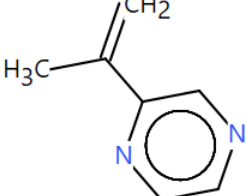
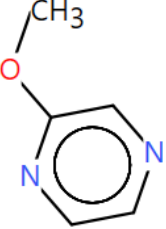
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7.14	17398-16-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Ethyl-3,5,6-trimethylpyrazine	<chem>CCc1nc(C)c(C)nc1C</chem>		[256]
7.15	18138-04-0	2420246	FEMA number: 3336 FEMA GRAS number: 6, 25 JECFA number: 777 FL No: 14.056 CoE No: 11303	2,3-Diethyl-5-methylpyrazine	<chem>CCc1ncc(C)nc1CC</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLMETHYLPYRAZINE235">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLMETHYLPYRAZINE235</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB021268">https://foodb.ca/compounds/FDB021268</a> [63,256.258]
7.16	18138-05-1	6390341	FEMA number: 3916 FEMA GRAS number: 19 JECFA number: 779 FL No: 14.095 CoE No: 11305	3,5-Diethyl-2-methylpyrazine	<chem>CCc1cnc(C)c(CC)n1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLMETHYLPYRAZINE352">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLMETHYLPYRAZINE352</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?ur">https://eur-lex.europa.eu/legal-content/EN/TXT/?ur</a>

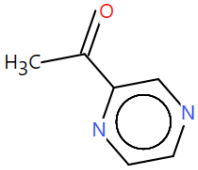
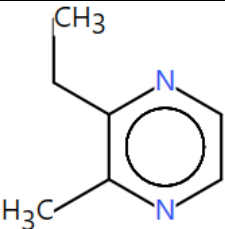
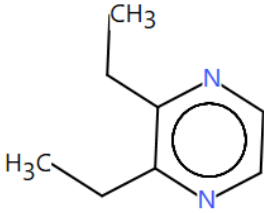
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7.17	18433-97-1	6060259	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,5-Dimethyl-3-propylpyrazine	<chem>CCCc1nc(C)cnc1C</chem>		[256]
7.18	29461-03-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-5-propylpyrazine	<chem>CCCc1cnc(C)cn1</chem>		<a href="https://foodb.ca/compounds/FDB019682">https://foodb.ca/compounds/FDB019682</a> [65,256]
7.19	32350-16-6	2510067	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3,5-Dimethyl-2-propylpyrazine	<chem>CCCc1ncc(C)nc1C</chem>		<a href="https://foodb.ca/compounds/FDB019677">https://foodb.ca/compounds/FDB019677</a> [66]
7.20	32736-91-7	6390928	FEMA number: 3915 FEMA GRAS number: 19 JECFA number: 778 FL No: 14.096 CoE No:11304	2,5- Diethyl-3-methylpyrazine	<chem>CCc1cnc(CC)c(C)n1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLMETHYLPYRAZINE253">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLMETHYLPYRAZINE253</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

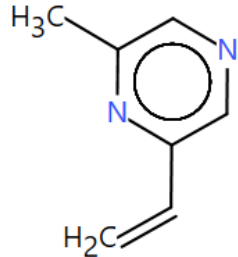
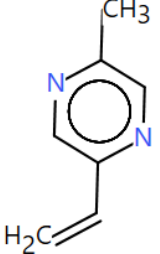
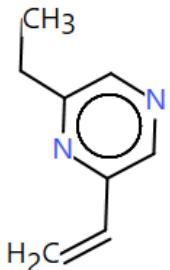
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7.21	34514-53-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,3-Diethyl-5,6-dimethylpyrazine	<chem>CCc1nc(C)c(C)nc1CC</chem>		<a href="https://foodb.ca/compounds/FDB019662">https://foodb.ca/compounds/FDB019662</a> [68]
7.22	38028-82-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Triethylpyrazine	<chem>CCc1cnc(CC)c(CC)n1</chem>		[256]
7.23	38325-19-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Tetraethylpyrazine	<chem>CCc1nc(CC)c(CC)nc1CC</chem>		UNDER DEVELOPMENT
7.24	40790-20-3		FEMA number: FEMA GRAS number: JECFA number: FL No: 14.101 CoE No: 11318	2,5-Dimethyl-3-isopropylpyrazine	<chem>CC(C)c1nc(C)cnc1C</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [69]
7.25	61892-95-3	8653239	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(5-Methylpyrazin-2-yl)methanol	<chem>Cc1cnc(CO)cn1</chem>		UNDER DEVELOPMENT

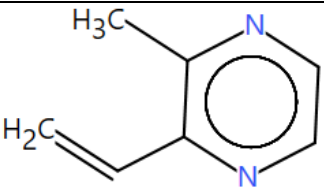
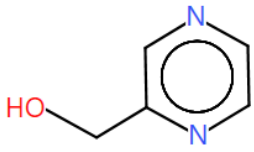
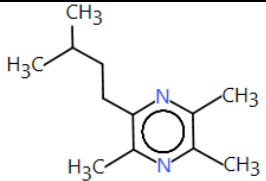
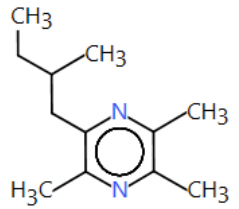
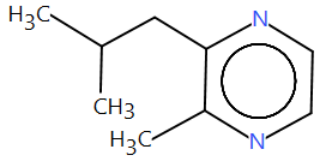
7.26	290-37-9	2060276	FEMA number: 4015 FEMA GRAS number: 20 JECFA number: 951 FL No: 14.144 CoE No: 11363	Pyrazine	c1cncn1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB012468">https://foodb.ca/compounds/FDB012468</a>  [256- 258]
7.27	109-08-0	2036458	FEMA number: 3309 FEMA GRAS number: 5, 25 JECFA number: 761 FL No: 14.027 CoE No: 2270	2-Methylpyrazine	Cc1cncn1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB011112">https://foodb.ca/compounds/FDB011112</a>  [11,144.256, 258]
7.28	13925-00-3	2376915	FEMA number: 3281 FEMA GRAS number: 5 JECFA number: 762 FL No: 14.022 CoE No: 2213	2-Ethylpyrazine	CCc1cncn1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLPYRAZINE</a>

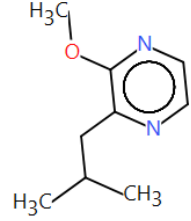
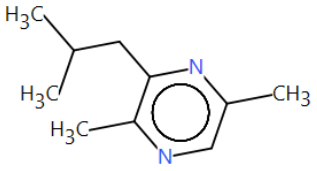
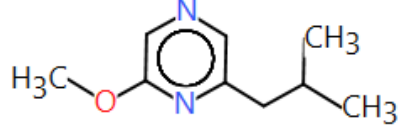
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7.29	18138-03-9	2420230	FEMA number: 3961 FEMA GRAS number: 19 JECFA number: 763 FL No: 14.142 CoE No: 11362	2-Propylpyrazine	CCCc1cncn1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB021561">https://foodb.ca/compounds/FDB021561</a>  [76,256, 258]
7.30	29460-90-0	2496467	FEMA number: 3940 FEMA GRAS number: 19 JECFA number: 764 FL No: 14.123 CoE No: 11343	2-Isopropylpyrazine	CC(C)c1cncn1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOPROPYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOPROPYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  [256, 258, 262]

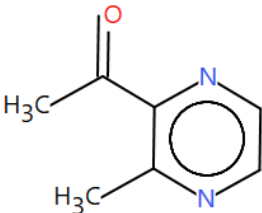
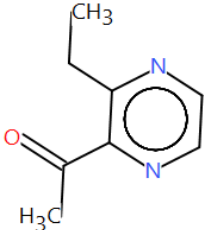
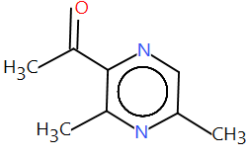
7.31	4177-16-6	2240452	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Vinylpyrazine	<chem>C=Cc1cnccn1</chem>		<a href="https://foodb.ca/compounds/FDB011429">https://foodb.ca/compounds/FDB011429</a> [256, 263]
7.32	18217-80-6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2--(trans-1-Propenyl)pyrazine	<chem>C/C=C/c1cnccn1</chem>		<a href="https://foodb.ca/compounds/FDB019817">https://foodb.ca/compounds/FDB019817</a> [256, 264]
7.33	38713-41-6	6627207	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Isopropenylpyrazine	<chem>CC(=C)c1cnccn1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOPROPENYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOPROPENYLPYRAZINE</a> <a href="https://foodb.ca/compounds/FDB016129">https://foodb.ca/compounds/FDB016129</a> [256, 265]
7.34	3149-28-8	2215798	FEMA number: 3302 FEMA GRAS number: 5 JECFA number: 787 FL No: 14.054 CoE No: 11347	2-Methoxypyrazine	<chem>COC1=NC=CN=C1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHOXYPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHOXYPYRAZINE</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB011162">https://foodb.ca/compounds/FDB011162</a> [256, 258, 266]

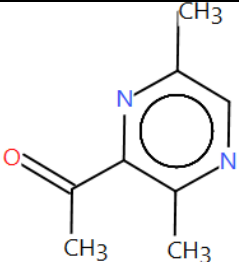
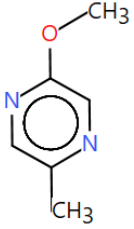
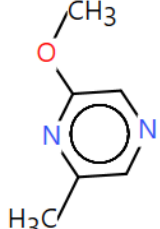
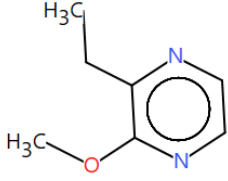
7.35	22047-25-2	2447535	FEMA number: 3126 FEMA GRAS number: 4 JECFA number: 784 FL No: 14.032 CoE No: 2286	2-Acetylpyrazine	CC(=O)C1=NC=CN=C1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [256, 258, 267]
7.36	15707-23-0	2397998	FEMA number: 3155 FEMA GRAS number: 4 JECFA number: 768 FL No: 14.006 CoE No: 548	2-Ethyl-3-methylpyrazine	CCC1=NC=CN=C1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMETHYLPYRAZINE2">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMETHYLPYRAZINE2</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB021162">https://foodb.ca/compounds/FDB021162</a> [256, 258, 268]
7.37	15707-24-1	2398001	FEMA number: 3136 FEMA GRAS number: 4, 25 JECFA number: 771 FL No: 14.005 CoE No: 534	2,3-Diethylpyrazine	CCC1=NC=CN=C1CC		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

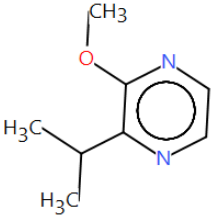
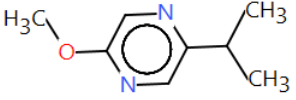
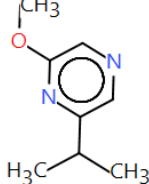
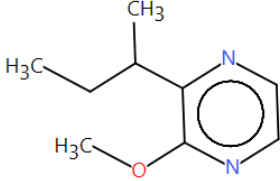
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7.38	13925-09-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-6-vinylpyrazine; 2-Ethenyl-6-methylpyrazine	<chem>CC1=CN=CC(=N1)C=C</chem>		<a href="https://foodb.ca/compounds/FDB004306">https://foodb.ca/compounds/FDB004306</a> [256, 270]	
7.39	13925-08-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-5-vinylpyrazine; 2-Ethenyl-5-methylpyrazine	<chem>CC1=CN=C(C=N1)C=C</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLVINYLPYRAZINE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLVINYLPYRAZINE</a> <a href="https://foodb.ca/compounds/FDB016301">https://foodb.ca/compounds/FDB016301</a> [256, 271]	
7.40	32736-90-6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Ethyl-6-vinylpyrazine	<chem>CCC1=CN=CC(=N1)C=C</chem>		[256]	

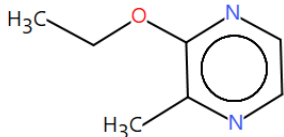
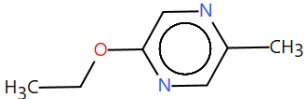
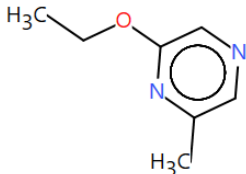
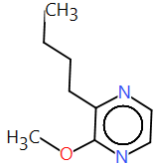
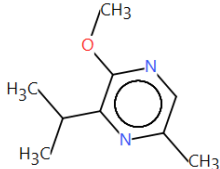
7.41	25058-19-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Vinyl-3-methylpyrazine; 2-Methyl-3-vinylpyrazine; 2-Ethenyl-3-methylpyrazine	<chem>CC1=NC=CN=C1C=C</chem>		[256]
7.42	6705-33-5	6916211	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Pyrazinylmethanol; (2-Hydroxymethyl)pyrazine	<chem>C1=CN=C(C=N1)CO</chem>		[256]
7.43	10132-43-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,3,5-Trimethyl-6-isopentylpyrazine; 2-Isopentyl-3,5,6-trimethylpyrazine; 2-Isoamyl-3,5,6-trimethylpyrazine	<chem>CC1=C(N=C(C(=N1)C)C)C</chem> <chem>CC(C)C</chem>		[256]
7.44	18482-80-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,3,5-Trimethyl-6-(2-methylbutyl)pyrazine; 2-(2-Methylbutyl)-3,5,6-trimethylpyrazine	<chem>CCC(C)CC1=NC(=C(N=C1)C)C</chem>		[256]
7.45	13925-06-9	2376936	FEMA number: 3133 FEMA GRAS number: 4 JECFA number: 773 FL No: 14.044 CoE No:	2-Isobutyl-3-methylpyrazine	<chem>CC1=NC=CN=C1CC(C)C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOBUTYLMETHYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOBUTYLMETHYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R08">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R08</a>

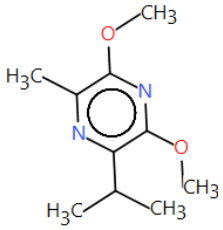
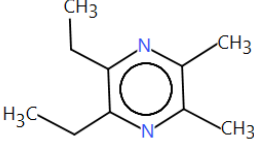
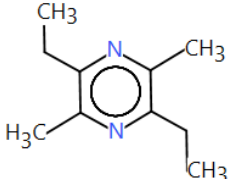
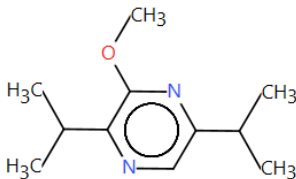
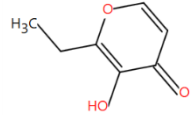
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7.46	24683-00-9	2464021	FEMA number: 3132 FEMA GRAS number: 4 JECFA number: 792 FL No: 14.043 CoE No: 11338	2-Methoxy-3-isobutylpyrazine; 2-Isobutyl-3-methoxypyrazine	<chem>CC(C)CC1=NC=CN=C1OC</chem>		<a href="https://www.hfpapp external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOBUTYLMETHOXYPIRAZINE">https://www.hfpapp external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOBUTYLMETHOXYPIRAZINE</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/com pounds/FDB008544">https://foodb.ca/com pounds/FDB008544</a> [256, 258, 273]
7.47	32736-94-0		FEMA number: 4100 FEMA GRAS number: 22 JECFA number: 2130 FL No: CoE No:	2-Isobutyl-3,6-dimethylpyrazine; 3-Isobutyl-2,5-dimethylpyrazine	<chem>CC1=CN=C(C(=N1)CC(C)C)C</chem>		<a href="https://www.hfpapp external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLISOBUTYLPYRAZINE36">https://www.hfpapp external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLISOBUTYLPYRAZINE36</a> [256, 274]
7.48	68039-33-8	2682510	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methoxy-6-(2-methylpropyl)pyrazine; 2-Isobutyl-6-methoxypyrazine	<chem>CC(C)CC1=CN=CC(=N1)OC</chem>		[256]

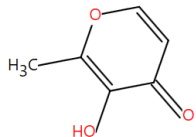
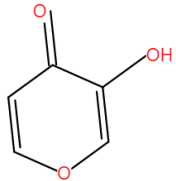
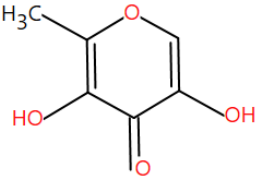
7.49	23787-80-6	2458898	FEMA number: 3964 FEMA GRAS number: 20 JECFA number: 950 FL No: 14.082 CoE No: 11296	2-Acetyl-3-methylpyrazine	CC1=NC=CN=C1C(=O)C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLMETHYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLMETHYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [256, 258, 275]
7.50	32974-92-8	2513162	FEMA number: 3250 FEMA GRAS number: 5 JECFA number: 785 FL No: 14.049 CoE No: 11293	2-Acetyl-3-ethylpyrazine	CCC1=NC=CN=C1C(=O)C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLETHYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLETHYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [256, 258, 276]
7.51	54300-08-2	2590760	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.055 CoE No: 11294	2-Acetyl-3,5-dimethylpyrazine	CC1=CN=C(C(=N1)C)C(=O)C		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB019681">https://foodb.ca/compounds/FDB019681</a> [258, 277]

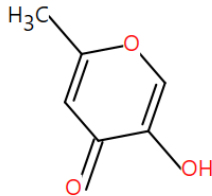
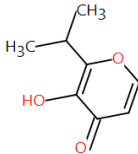
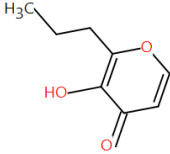
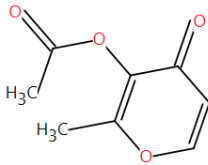
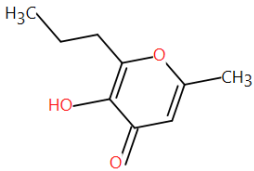
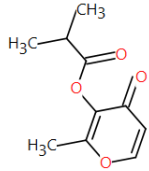
7.52	54300-09-3	2590776	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Acetyl-3,6-dimethylpyrazine	<chem>CC1=CN=C(C(=N1)C(=O)C)C</chem>		[258, 278]
7.53	2882-22-6	2207389	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methoxy-5-methylpyrazine	<chem>CC1=CN=C(C(=N1)OC)C</chem>		[258]
7.54	2882-21-5	2207373	FEMA number: FEMA GRAS number: JECFA number: 788 FL No: 14.025 CoE No: 2266	2-Methoxy-6-methylpyrazine	<chem>CC1=CN=CC(=N1)OC</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [258]
7.55	25680-58-4	2471840	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.112 CoE No:	2-Methoxy-3-ethylpyrazine; 3-Ethyl-2-methoxypyrazine	<chem>CCC1=NC=CN=C1OC</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB019741">https://foodb.ca/compounds/FDB019741</a> [258, 280]

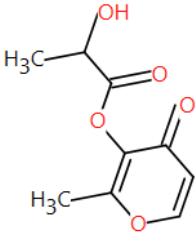
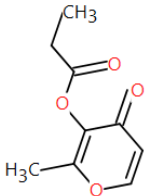
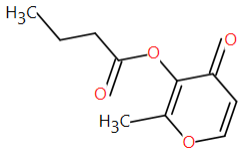
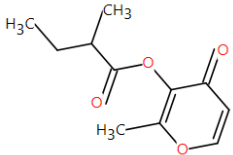
7.56	25773-40-4	2472561	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.057 CoE No:	2-Methoxy-3-isopropylpyrazine ; 3-Isopropyl-2-methoxypyrazine; 2-Isopropyl-3-methoxypyrazine	CC(C)C1=NC=CN=C1OC		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB020065">https://foodb.ca/compounds/FDB020065</a>  [258, 281]
7.57	56891-99-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methoxy-5-isopropylpyrazine ; 2-Isopropyl-5-methoxypyrazine	CC(C)C1=CN=C(C=N1)OC		<a href="https://foodb.ca/compounds/FDB019739">https://foodb.ca/compounds/FDB019739</a>  [258, 282]
7.58	68039-46-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methoxy-6-isopropylpyrazine ; 2-Isopropyl-6-methoxypyrazine	CC(C)C1=CN=CC(=N1)OC		<a href="https://foodb.ca/compounds/FDB019740">https://foodb.ca/compounds/FDB019740</a>  [258, 283]
7.59	24168-70-5	2460509	FEMA number: 3433 FEMA GRAS number: 8, 25 JECFA number: 791 FL No: 14.062 CoE No: 11300	2-Methoxy-3-(1-methylpropyl)pyrazine; 2-sec-Butyl-3-methoxypyrazine	CCC(C)C1=NC=CN=C1OC		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHOXYMETHYLPROPYLPYRAZINE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHOXYMETHYLPROPYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB010918">https://foodb.ca/compounds/FDB010918</a>

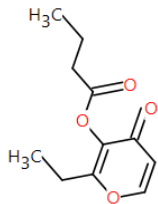
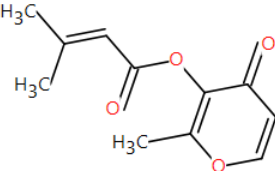
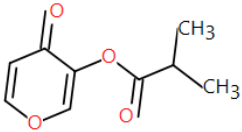
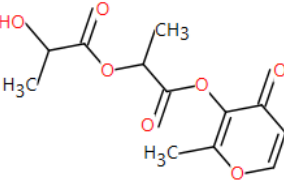
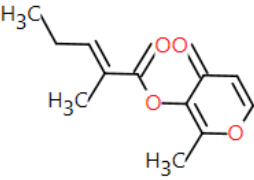
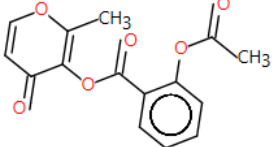
							[258, 284]
7.60	32737-14-7	2511846	FEMA number: FEMA GRAS number: JECFA number: 793 FL No: 14.067 CoE No: 11921	2-Methyl-3-ethoxypyrazine; 2-Ethoxy-3-methylpyrazine	CCOC1=NC=CN=C1C		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [258, 259]
7.61	67845-34-5	2673092	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-5-ethoxypyrazine; 2-Ethoxy-5-methylpyrazine	CCOC1=NC=C(N=C1)C		[258]
7.62	53163-97-6	2584029	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-6-ethoxypyrazine; 2-Ethoxy-6-methylpyrazine	CCOC1=NC(=CN=C1)C		[258]
7.63			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Butyl-3-methoxypyrazine	CCCCC1=NC=CN=C1OC		[256]
7.64	32021-41-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methoxy-3-isopropyl-5-methylpyrazine; 3-Isopropyl-2-methoxy-5-methylpyrazine	CC1=CN=C(C(=N1)C(C)C)OC		[256]

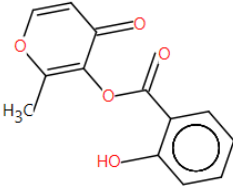
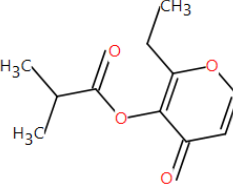
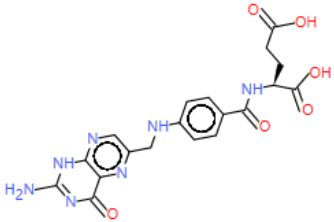
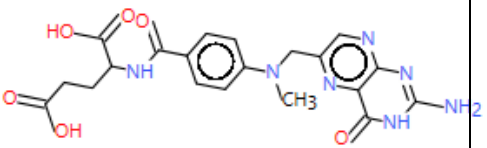
7.65	32021-42-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,6-Dimethoxy-3-isopropyl-5-methylpyrazine; 2-Isopropyl-3,5-dimethoxy-6-methylpyrazine	<chem>CC1=C(N=C(C(=N1)C(C)C)OC)OC</chem>		[256]
7.66	34514-53-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,3-Diethyl-5,6-dimethylpyrazine	<chem>CCC1=NC(=C(N=C1CC)C)C</chem>		<a href="https://foodb.ca/compounds/FDB019662">https://foodb.ca/compounds/FDB019662</a> [256, 260]
7.67	18903-30-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,5-Diethyl-3,6-dimethylpyrazine	<chem>CCC1=C(N=C(C(=N1)C)CC)C</chem>		<a href="https://foodb.ca/compounds/FDB019661">https://foodb.ca/compounds/FDB019661</a> [256, 261]
7.68	87386-79-6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methoxy-3,6-diisobutylpyrazine; 2,5-Diisopropyl-3-methoxypyrazine	<chem>CC(C)C1=CN=C(C(=N1)OC)C(C)C</chem>		[256]
8	4940-11-8	2255825	FEMA number: 3487 FEMA GRAS number: 10 JECFA number: 1481 FL No: 07.047 CoE No: 692	<b>2-Ethyl-3-hydroxy-4-pyrone</b>	<chem>CCC1OC=CC(=O)C=1O</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMA LTOL">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMA LTOL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

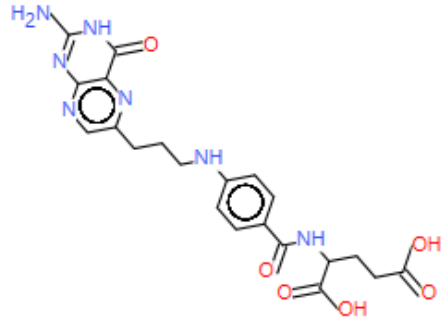
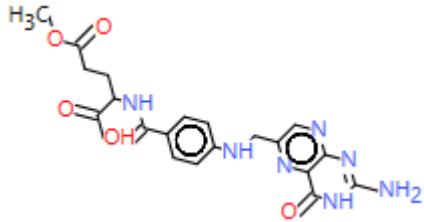
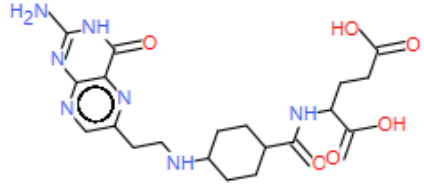
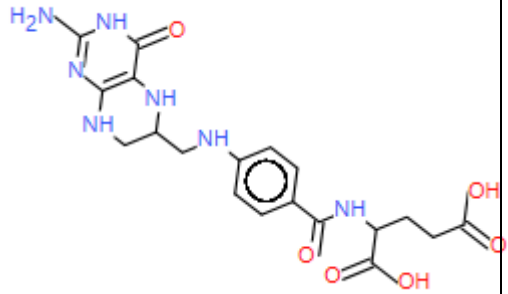
							[7,140]
9	118-71-8	2042718	FEMA number: 2656 FEMA GRAS number: 3 JECFA number: 1480 FL No: 07.014 CoE No: 148	2-Methyl-3-hydroxy-4-pyrone; Maltol	CC1OC=CC(=O)C=1O		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MALTOL">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MALTOL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB002712">https://foodb.ca/compounds/FDB002712</a>  [9,142]
9.1	496-63-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Pyromeconic acid	OC1=COC=CC1=O		
9.2	1073-96-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-Hydroxymaltol	CC1=C(C(=O)C(=CO1)O)O		<a href="https://foodb.ca/compounds/FDB010977">https://foodb.ca/compounds/FDB010977</a> [70]

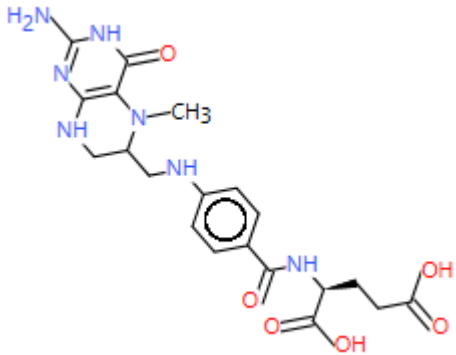
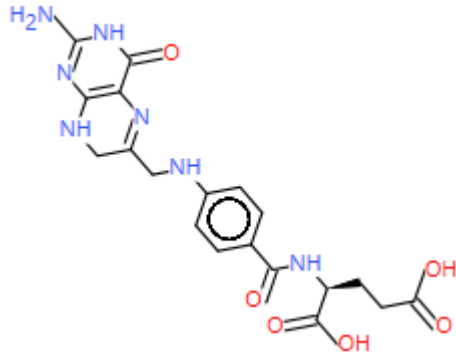
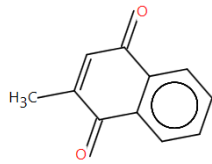
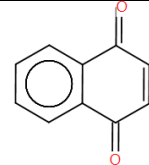
9.3	644-46-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Allomaltol	<chem>CC1=CC(=O)C(=CO1)O</chem>		UNDER DEVELOPMENT
9.4	40311-00-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Isopropylmaltol	<chem>CC(C)C1=C(C(=O)C=CO1)O</chem>		UNDER DEVELOPMENT
9.5	4940-16-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Hydroxy-2-propylpyran-4-one	<chem>CCCC1=C(C(=O)C=CO1)O</chem>		UNDER DEVELOPMENT
9.6	28787-36-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Maltol acetate	<chem>CC1=C(C(=O)C=CO1)OC(=O)C</chem>		UNDER DEVELOPMENT
9.7	40861-87-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4H-Pyran-4-one, 2-propyl-3-hydroxy-6-methyl-	<chem>CCCC1=C(C(=O)C=C(O1)C)O</chem>		UNDER DEVELOPMENT
9.8	65416-14-0	2657552	FEMA number: 3462 FEMA GRAS number: 9 JECFA number: 1482 FL No: 09.525 CoE No: 10739	Maltol isobutyrate; Maltol isobutyrate	<chem>CC1=C(C(=O)C=CO1)OC(=O)C(C)C</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MALTYLISOBUTYRATE">https://www.hfpapp external.fda.gov/scripts/fdcc/index.cfm ?set=FoodSubstances&amp;id=MALTYLISOBUTYRATE</a>  <a href="https://eur-">https://eur-</a>

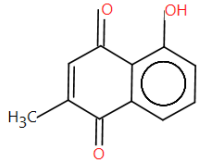
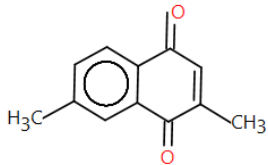
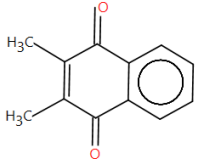
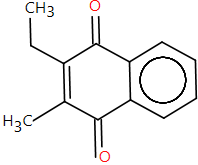
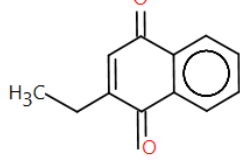
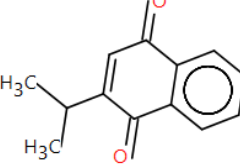
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9.9	67860-02-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Maltol lactate	<chem>CC(O)C(=O)OC1C(=O)C=COC=1C</chem>		UNDER DEVELOPMENT
9.10	68555-63-5		FEMA number: 3941 FEMA GRAS number: 19 JECFA number: 1483 FL No: CoE No:	Maltol propionate	<chem>CCC(=O)OC1C(=O)C=COC=1C</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MALTOLPROPIONATE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MALTOLPROPIONATE</a> [72]
9.11	67860-01-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Maltol butyrate	<chem>CCCC(=O)OC1C(=O)C=COC=1C</chem>		UNDER DEVELOPMENT
9.12	85665-78-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-4-oxo-4H-pyran-3-yl 2-methylbutyrate	<chem>CCC(C)C(=O)OC1C(=O)C=COC=1C</chem>		UNDER DEVELOPMENT

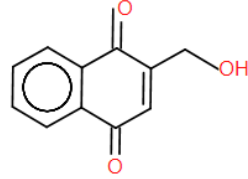
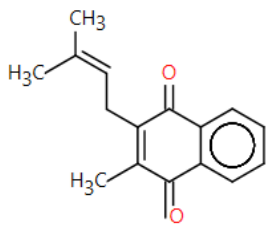
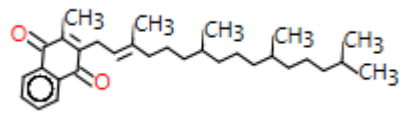
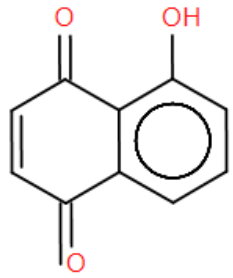
9.13	93805-72-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Ethyl-4-oxo-4H-pyran-3-yl butyrate	<chem>CCCC(=O)OC1C(=O)C=COC=1C</chem>		UNDER DEVELOPMENT
9.14	93917-69-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-4-oxo-4H-pyran-3-yl 3-methyl-2-butenate	<chem>CC(C)=CC(=O)OC1C(=O)C=COC=1C</chem>		UNDER DEVELOPMENT
9.15	94022-34-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Oxo-4H-pyran-3-yl isobutyrate	<chem>CC(C)C(=O)OC1=COC=CC1=O</chem>		UNDER DEVELOPMENT
9.16	94134-41-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Methyl-2-((2-methyl-4-oxo-4H-pyran-3-yl)oxy)-2-oxoethyl lactate	<chem>CC(O)C(=O)OC(C)C(=O)OC1C(=O)C=COC=1C</chem>		UNDER DEVELOPMENT
9.17	94199-66-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(2-methyl-4-oxopyran-3-yl) (E)-2-methylpent-2-enoate	<chem>CCC=C(C)C(=O)OC1C(=O)C=COC=1C</chem>		UNDER DEVELOPMENT
9.18	147249-33-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Aspalatone	<chem>CC(=O)Oc1cccc1C(=O)OC1C(=O)C=COC=1C</chem>		UNDER DEVELOPMENT

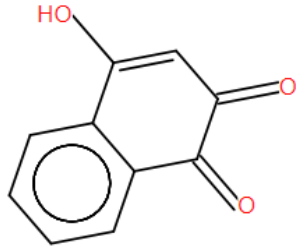
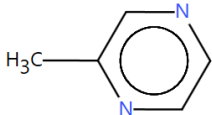
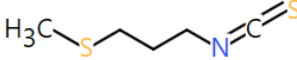
9.19	147249-34-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Salicylic acid maltol ester	<chem>CC1OC=CC(=O)C=1OC(=O)c1ccccc1O</chem>		UNDER DEVELOPMENT
9.20	852997-28-5		FEMA number: 4534 FEMA GRAS number: 24 JECFA number: FL No: CoE No:	Ethyl maltol isobutyrate	<chem>CCC1OC=CC(=O)C=1OC(=O)C(C)C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMALTOLISOBUTYRATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMALTOLISOBUTYRATE</a> [73]
10	59-30-3	2004190	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>Folic acid; Folacin; (2S)-2-[(4-[(2-amino-4-oxo-1,4-dihydropteridin-6-yl)methyl]amino)phenyl]formamido]pentanedioic acid</b>	<chem>NC1Nc2ncc(CNc3ccc(cc3)C(=O)N[C@@H](CCC(=O)C(O)=O)C(O)=O)nc2C(=O)N=1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FOLICACID">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FOLICACID</a> <a href="https://foodb.ca/compounds/FDB014504">https://foodb.ca/compounds/FDB014504</a> [8,141]
10.1	2410-93-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Methopterin	<chem>CN(Cc1cnc2N=C(N)NC(=O)c2n1)c1ccc(cc1)C(=O)NC(CCC(=O)O)C(=O)O</chem>		UNDER DEVELOPMENT

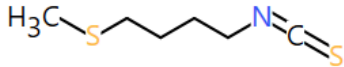
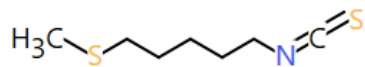
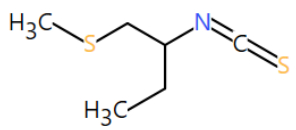
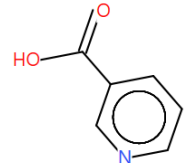
10.2			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Dihomofolic acid	<chem>NC1NC(=O)c2nc(CCCNc3ccc(cc3)C(=O)NC(CCC(=O)=O)C(O)=O)cnc2N=1</chem>		UNDER DEVELOPMENT
10.3	70114-87-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Folic acid 5-methyl ester	<chem>COC(=O)CCC(NC(=O)c1ccc(NCc2cnc3N=C(N)NC(=O)c3n2)cc1)C(O)=O</chem>		UNDER DEVELOPMENT
10.4			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1',2',3',4',5',6'-Hexahydrohomofolic acid	<chem>NC1NC(=O)c2nc(CCNC3CCC(CC3)C(=O)NC(CCC(O)=O)C(O)=O)cnc2N=1</chem>		UNDER DEVELOPMENT
10.5	135-16-0	2051811	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Tetrahydrofolic acid; Tetrahydrofolate	<chem>C1C(NC2=C(N1)N=C(NC2=O)N)CNC3=CC=C(C=C3)C(=O)NC(CCC(=O)O)C(=O)O</chem>		<a href="https://foodb.ca/compounds/FDB031192">https://foodb.ca/compounds/FDB031192</a> [216]

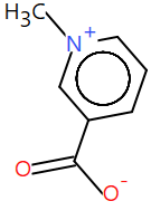
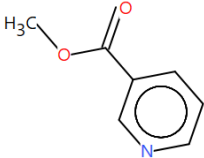
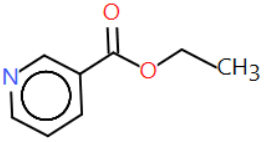
10.6	134-35-0	603809 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Levomefolic acid	<chem>CN1C(CNC2=C1C(=O)NC(=N2)N)CNC3=CC=C(C=C3)C(=O)NC(CCC(=O)O)C(=O)O</chem>		[315]
10.7	4033-27-6	609824 0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Dihydrofolic acid	<chem>C1C(=NC2=C(N1)N=C(NC2=O)N)CNC3=CC=C(C=C3)C(=O)NC(CCC(=O)O)C(=O)O</chem>		<a href="https://foodb.ca/compounds/FDB022395">https://foodb.ca/compounds/FDB022395</a> [217]
11	58-27-5	200372 6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>Vitamin K3,1,4-Naphthalenedione, 2-methyl-; Menadione</b>	<chem>CC1=CC(=O)c2ccccc2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB000953">https://foodb.ca/compounds/FDB000953</a> [10,143,285]
11.1	130-15-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,4-Naphthalenedione	<chem>O=C1C=CC(=O)c2ccccc12</chem>		UNDER DEVELOPMENT

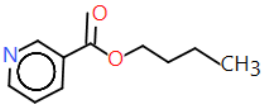
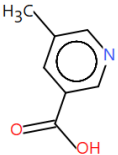
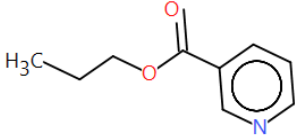
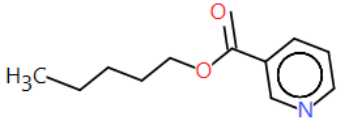
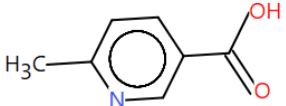
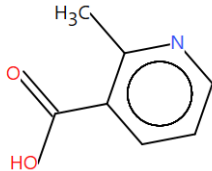
11.2	481-42-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Plumbagin	<chem>CC1=CC(=O)c2c(O)cccc2C1=O</chem>		<a href="https://foodb.ca/compounds/FDB005844">https://foodb.ca/compounds/FDB005844</a> [74,286]
11.3	482-70-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Chimaphilin	<chem>Cc1ccc2C(=O)C=C(C)C(=O)c2c1</chem>		UNDER DEVELOPMENT
11.4	2197-57-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,3-Dimethyl-1,4-naphthoquinone	<chem>CC1C(=O)c2ccccc2C(=O)C=1C</chem>		UNDER DEVELOPMENT
11.5	2589-56-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,4-Naphthalenedione, 2-ethyl-3-methyl-	<chem>CCC1C(=O)c2ccccc2C(=O)C=1C</chem>		UNDER DEVELOPMENT
11.6	5409-32-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Ethyl-1,4-naphthoquinone	<chem>CCC1=CC(=O)c2ccccc2C1=O</chem>		UNDER DEVELOPMENT
11.7	20175-89-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,4-Naphthoquinone, 2-isopropyl-	<chem>CC(C)C1=CC(=O)c2ccccc2C1=O</chem>		UNDER DEVELOPMENT

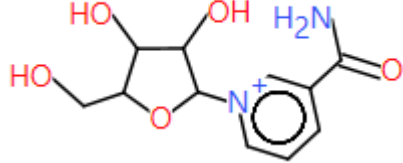
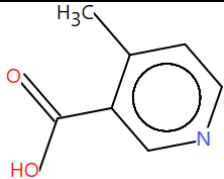
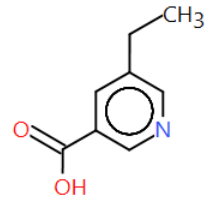
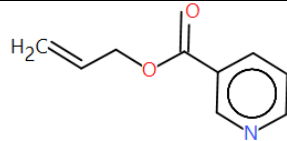
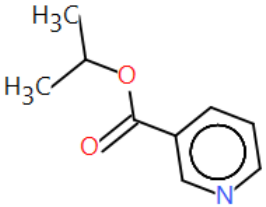
11.8	55700-10-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,4-Naphthalenedione ,2-(hydroxymethyl)-	<chem>OCC1=CC(=O)c2cccc2C1=O</chem>		UNDER DEVELOPMENT
11.9	957-78-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Vitamin K2(5); Menaquinone 1	<chem>CC1=C(C(=O)C2=CC=C C=C2C1=O)CC=C(C)C</chem>		[285]
11.10	84-80-0	201564 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Phylloquinone; Vitamin K1; Phytonadione	<chem>CC1=C(C(=O)C2=CC=C C=C2C1=O)C/C=C(\C)CCC(C)CCCC(C)CCCC(C)C</chem>		[220, 285]
11.11	481-39-0	207567 5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Juglone; 5-Hydroxy-1,4-naphthoquinone	<chem>C1=CC2=C(C(=O)C=CC2=O)C(=C1)O</chem>		<a href="https://foodb.ca/compounds/FDB002708">https://foodb.ca/compounds/FDB002708</a> [286, 287]

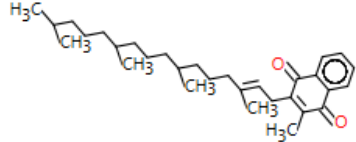
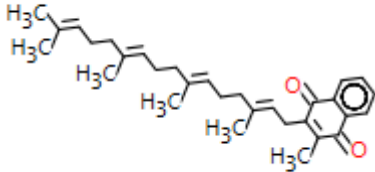
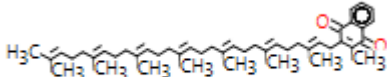
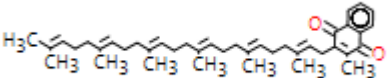
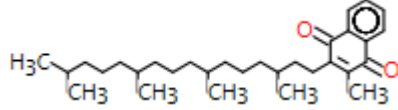
11.12	83-72-7	2014963	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Lawsone 2-Hydroxy-1,4- naphthoquinone	<chem>C1=CC=C2C(=C1)C(=CC(=O)C2=O)O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=ColorAdditives&amp;id=Henna">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=ColorAdditives&amp;id=Henna</a>  [286, 288]
12	109-08-0	2036458	FEMA number: 3309 FEMA GRAS number: 5, 25 JECFA number: 761 FL No: 14.027 CoE No: 2270	2- Methylpyrazine	<chem>Cc1cncn1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPYRAZINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB01112">https://foodb.ca/compounds/FDB01112</a> [11,144]
13	505-79-3	2080203	FEMA number: 3312 FEMA GRAS number: 5, 25 JECFA number: 1564 FL No: 12.030 CoE No: 2326	1- Isothiocyanato- 3- (methylsulfanyl) propane	<chem>CSCCCN=C=S</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLT HIOPROPYLISOT HIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLT HIOPROPYLISOT HIOCYANATE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB012744">https://foodb.ca/compounds/FDB012744</a>

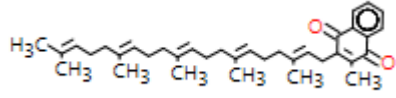
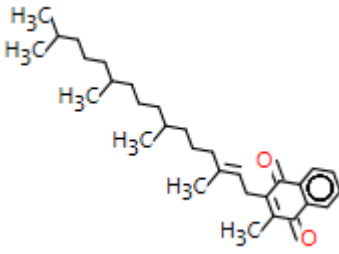
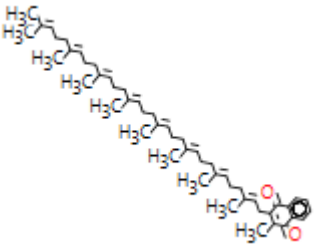
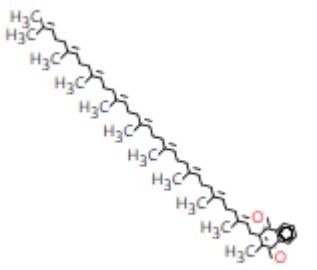
							[12,145]
13.1	4430-36-8		FEMA number: 4414 FEMA GRAS number: 23 JECFA number: 1892 FL No: 12.030 CoE No: 2326	Erucin	CSCCCCN=C=S		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTIOBUTYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTIOBUTYLISOTHIOCYANATE</a>  <a href="https://foodb.ca/compounds/FDB011906">https://foodb.ca/compounds/FDB011906</a> [77]
13.2	4430-42-6		FEMA number: 4416 FEMA GRAS number: 23 JECFA number: 1896 FL No: CoE No:	Berteroin	CSCCCCCN=C=S		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTIOBUTYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTIOBUTYLISOTHIOCYANATE</a> [78]
13.3				4-(Methylthio)-3-butyl isothiocyanate	CCC(CSC)N=C=S		UNDER DEVELOPMENT
14	59-67-6	2004410	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Carboxypyridine; Nicotinic acid; Niacin	OC(=O)c1ccnc1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=NIACIN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=NIACIN</a> [13,146]

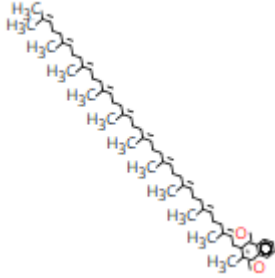
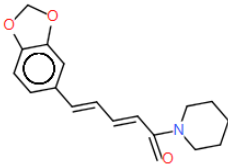
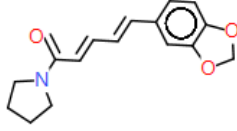
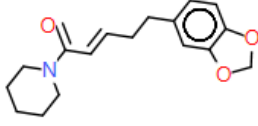
14.1	535-83-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Trigonelline	<chem>C[n+]1cccc(c1)C([O-])=O</chem>		<a href="https://foodb.ca/compounds/FDB002237">https://foodb.ca/compounds/FDB002237</a> [79]
14.2	93-60-7	FEMA number: 3709 FEMA GRAS number: 13 JECFA number: 1320 FL No: 14.071 CoE No:	Methyl nicotinate	<chem>COC(=O)c1ccncc1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLNICOTINATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLNICOTINATE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB001015">https://foodb.ca/compounds/FDB001015</a> [80]
14.3	614-18-6	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.110 CoE No:	Ethyl nicotinate	<chem>CCOC(=O)c1ccncc1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB001016">https://foodb.ca/compounds/FDB001016</a> [81]

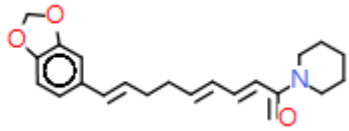
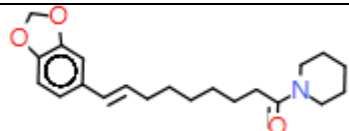
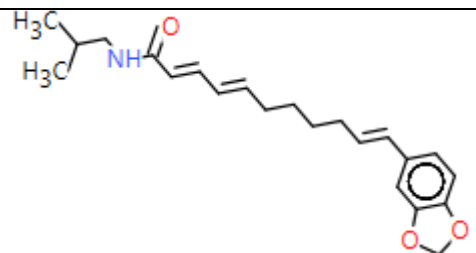
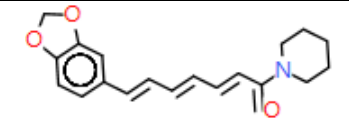
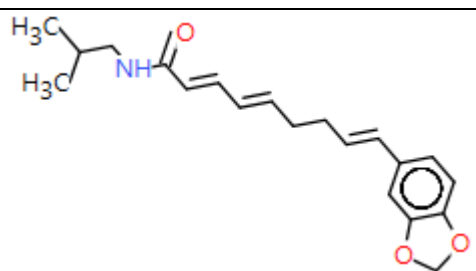
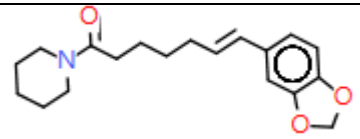
14.4	6938-06-3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Butyl nicotinate	CCCCOC(=O)c1ccnc1		UNDER DEVELOPMENT
14.5	3222-49-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-Methylnicotinic acid	Cc1cnc(c1)C(O)=O		UNDER DEVELOPMENT
14.6	7681-15-4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Propyl nicotinate	CCCOC(=O)c1ccnc1		UNDER DEVELOPMENT
14.7	49558-04-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Amyl nicotinate	CCCCCOC(=O)c1ccnc1		UNDER DEVELOPMENT
14.8	3222-47-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	6-Methylnicotinic acid	Cc1ccc(en1)C(O)=O		UNDER DEVELOPMENT
14.9	3222-56-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methylnicotinic acid	Cc1ncccc1C(O)=O		UNDER DEVELOPMENT

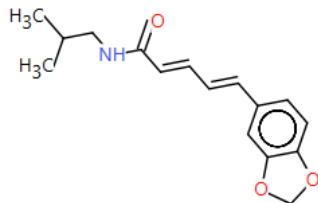
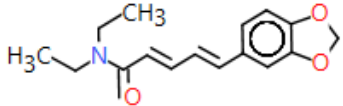
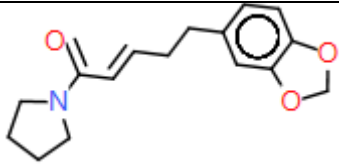
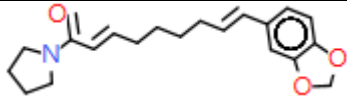
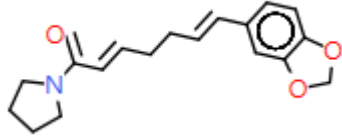
14.10	1341-23-7	8115110	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Nicotinamide riboside; <i>N</i> -Ribosylnicotinamide	<chem>C1=CC(=C[N+](=C1)C2C(C(C(O2)CO)O)C(=O)N</chem>		<a href="https://foodb.ca/compounds/FDB022281">https://foodb.ca/compounds/FDB022281</a> [219]
14.11	3222-50-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Methylnicotinic acid	<chem>Cc1ccncc1C(=O)O</chem>		UNDER DEVELOPMENT
14.12	3222-53-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-Ethylpyridine-3-carboxylic acid	<chem>CCc1cncc(c1)C(=O)O</chem>		UNDER DEVELOPMENT
14.13	25635-12-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Allyl nicotinate	<chem>C=CCOC(=O)c1ccncc1</chem>		UNDER DEVELOPMENT
14.14	553-60-6	2090431	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.120 CoE No:	Isopropyl nicotinate	<chem>CC(C)OC(=O)C1=CN=C</chem> <chem>C=C1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [307]

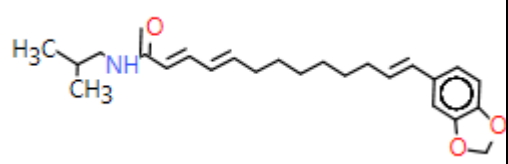
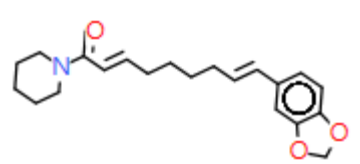
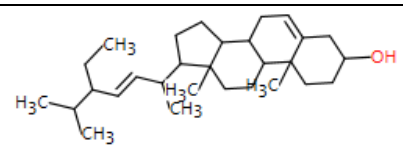
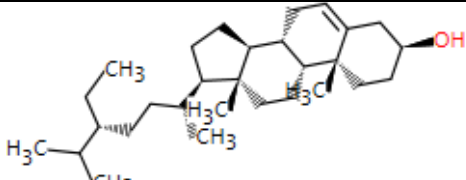
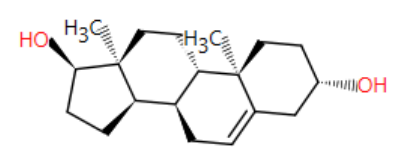
15	81818-54-4	2798339	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>Vitamin K; 2-Methyl-3-(3,7,11,15-tetramethylhexadec-2-en-1-yl)naphthalene-1,4-dione</b>	<chem>CC(C)CCCC(C)CCCC(C)CCCC(C)=CCC1=C(C)C(=O)c2ccccc2C1=O</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMINK">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VITAMINK</a>  <a href="https://foodb.ca/compounds/FDB012357">https://foodb.ca/compounds/FDB012357</a> [14]
15.1	863-61-6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Menaquinone 4	<chem>CC(C)=CCC\C(C)=C\CC\C(C)=C\CC\C(C)=C\CC1C(=O)c2ccccc2C(=O)C=1C</chem>		<a href="https://foodb.ca/compounds/FDB029792">https://foodb.ca/compounds/FDB029792</a> [82,285,290]
15.2	2124-57-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Menaquinone 7	<chem>CC(C)=CCCC(C)=CCCC(C)=CCCC(C)=CCCC(C)=CC1C(=O)c2ccccc2C(=O)C=1C</chem>		UNDER DEVELOPMENT [83,285,290]
15.3	84-81-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Menaquinone 6	<chem>CC(C)=CCC\C(C)=C\CC\C(C)=C\CC\C(C)=C\CC\C(C)=C\CC1C(=O)c2ccccc2C(=O)C=1C</chem>		<a href="https://foodb.ca/compounds/FDB001310">https://foodb.ca/compounds/FDB001310</a> [84,285,290]
15.4	64236-23-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2',3'-Dihydro-phytomenadione	<chem>CC(C)CCCC(C)CCCC(C)CCCC(C)CCC1C(=O)c2ccccc2C(=O)C=1C</chem>		<a href="https://foodb.ca/compounds/FDB013405">https://foodb.ca/compounds/FDB013405</a> [85,285]

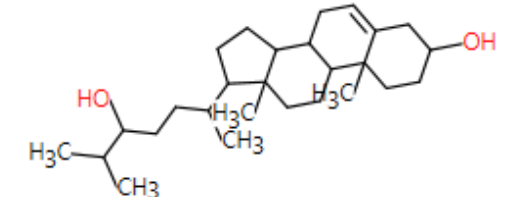
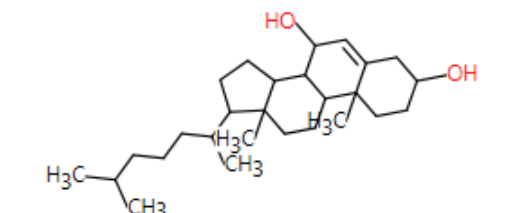
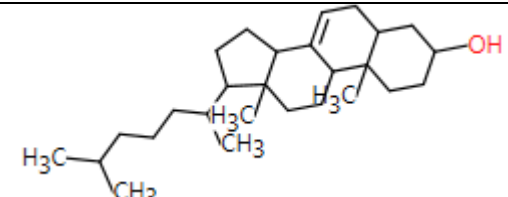
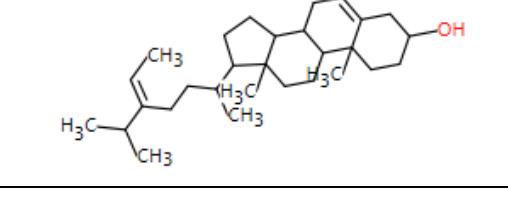
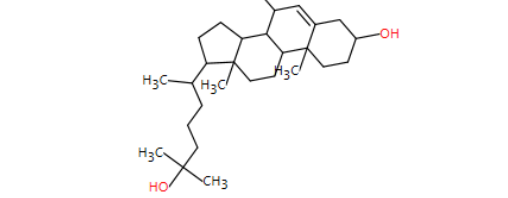
15.5	1182-68-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Menaquinone 5	<chem>CC(C)=CCCC(C)=CCCC(C)=CCCC(C)=CCCC(C)=CCC1C(=O)c2ccccc2C(=O)C=1C</chem>		[285, 290]
15.6	84-80-0	201564 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Phylloquinone; Vitamin K1	<chem>CC1=C(C(=O)C2=CC=C(C=C2C1=O)C/C=C(\C)/C/C=C(\C)/CCCC(C)CCCC(C)C</chem>		[220, 285]
15.7	523-38-6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Menaquinone 8; Vitamin MK 8; Vitamin K2(40)	<chem>CC1=C(C(=O)C2=CC=C(C=C2C1=O)C/C=C(\C)/C/C=C(\C)/CC/C=C(\C)/C/C=C(\C)/CC/C=C(\C)/C/C=C(\C)/CC/C=C(\C)/C/C=C(\C)/C</chem>		[290]
15.8	523-39-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Menaquinone 9; Vitamin MK 9; Vitamin K2(45)	<chem>CC1=C(C(=O)C2=CC=C(C=C2C1=O)C/C=C(\C)/C/C=C(\C)/CC/C=C(\C)/C/C=C(\C)/CC/C=C(\C)/C/C=C(\C)/CC/C=C(\C)/C/C=C(\C)/CCC=C(C)C</chem>		[290]

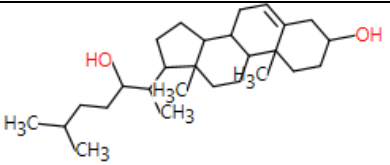
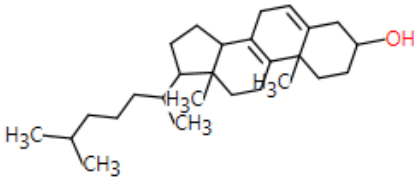
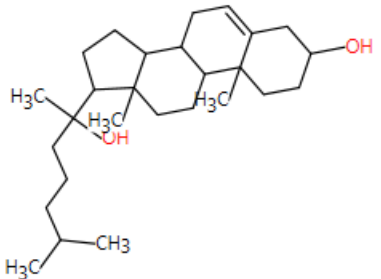
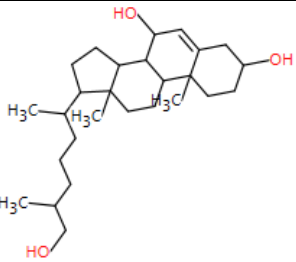
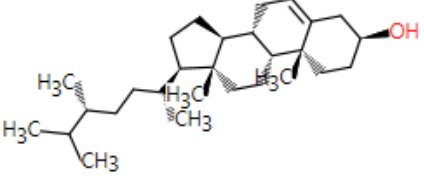
15.9	523-40-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Menaquinone 10; Vitamin MK 10; Vitamin K2(50)	<chem>CC1=C(C(=O)C2=CC=C C=C2C1=O)C/C=C(\C)/C C/C=C(\C)/CC/C=C(\C)/C C/C=C(\C)/CC/C=C(\C)/C C/C=C(\C)/CC/C=C(\C)/C C/C=C(\C)/CC/C=C(\C)/C CC=C(C)C</chem>		[290]
16	94-62-2	2023480	FEMA number: 2909 FEMA GRAS number: 3 JECFA number: 1600 FL No: 14.003 CoE No: 492	<b>Piperine; Bioperine; 1- Piperoylpiperidi ne</b>	<chem>O=C(C=CC=Cc1ccc2OC Oc2c1)N1CCCCC1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB000449">https://foodb.ca/compounds/FDB000449</a> [15,147, 234]
16.1	25924-78-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Piperylene	<chem>O=C(\C=C\C=C\c1ccc2O COc2c1)N1CCCC1</chem>		<a href="https://foodb.ca/compounds/FDB000444">https://foodb.ca/compounds/FDB000444</a> [86]
16.2	23512-46-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Piperanine	<chem>O=C(C=CCCc1ccc2OCO c2c1)N1CCCCC1</chem>		<a href="https://foodb.ca/compounds/FDB012066">https://foodb.ca/compounds/FDB012066</a> [87]

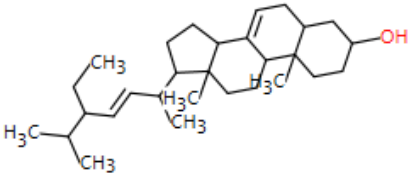
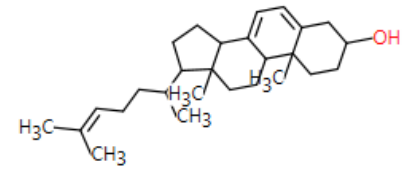
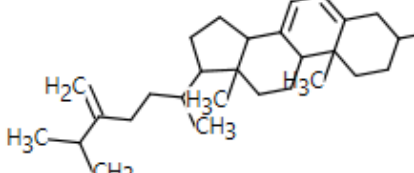
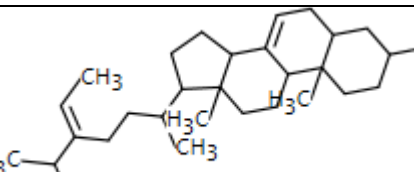
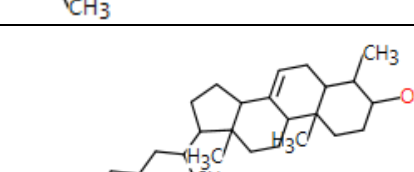
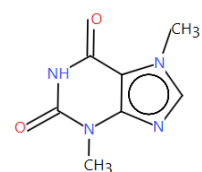
16.3	107584-38-3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Dehydropipernon aline	<chem>O=C(C=CC=CCCC=Cc1ccc2OCOc2c1)N1CCCCC1</chem>		<a href="https://foodb.ca/compounds/FDB020627">https://foodb.ca/compounds/FDB020627</a> [88]
16.4	30505-89-6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Piperolein B	<chem>O=C(CCCCCC=Cc1ccc2OCOc2c1)N1CCCCC1</chem>		<a href="https://foodb.ca/compounds/FDB002183">https://foodb.ca/compounds/FDB002183</a> [89]
16.5	54794-74-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Pipercide	<chem>CC(C)CNC(=O)C=CC=C CCCCC=Cc1ccc2OCOc2c1</chem>		<a href="https://foodb.ca/compounds/FDB011487">https://foodb.ca/compounds/FDB011487</a> [90]
16.6	583-34-6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Piperettin	<chem>O=C(C=CC=CC=Cc1ccc2OCOc2c1)N1CCCCC1</chem>		<a href="https://foodb.ca/compounds/FDB012745">https://foodb.ca/compounds/FDB012745</a> [91]
16.7	94079-67-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Retrofractamide A	<chem>CC(C)CNC(=O)C=CC=C CCC=Cc1ccc2OCOc2c1</chem>		<a href="https://foodb.ca/compounds/FDB011485">https://foodb.ca/compounds/FDB011485</a> [92]
16.8	30505-92-1	FEMA number: FEMA GRAS number: JECFA number: FL No:	Piperolein A	<chem>O=C(CCCC\C=C\c1ccc2OCOc2c1)N1CCCCC1</chem>		<a href="https://foodb.ca/compounds/FDB002001">https://foodb.ca/compounds/FDB002001</a> [93]

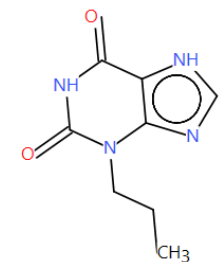
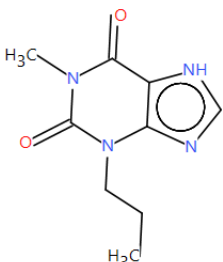
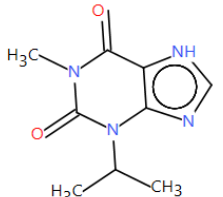
			CoE No:				
16.9	5950-12-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Piperlonguminine	<chem>CC(C)CNC(=O)C=CC=Cc1ccc2OCOc2c1</chem>		[291]
16.10	71256-99-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>N,N</i> -Diethyl-5-(3,4-methylenedioxyphenyl)-2,4-pentadienoic acid amide	<chem>CCN(CC)C(=O)C=CC=Cc1ccc2OCOc2c1</chem>		UNDER DEVELOPMENT
16.11	117137-65-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4,5-Dihydropiperlyne	<chem>O=C(C=CCCc1ccc2OCOc2c1)N1CCCC1</chem>		<a href="https://foodb.ca/compounds/FDB018269">https://foodb.ca/compounds/FDB018269</a> [94]
16.12			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Brachyamide B	<chem>O=C(\C=C\CCCC\C=C\c1ccc2OCOc2c1)N1CCCC1</chem>		<a href="https://foodb.ca/compounds/FDB006604">https://foodb.ca/compounds/FDB006604</a> [95,234]
16.13	112448-68-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(2 <i>E</i> ,6 <i>E</i> )-7-(1,3-benzodioxol-5-yl)-1-pyrrolidin-1-ylhepta-2,6-dien-1-one; Sarmetosine; 7-(3',4'-Methylenedioxy	<chem>C1CCN(C1)C(=O)/C=C/C/C=C/C2=CC3=C(C=C2)OCO3</chem>		[234, 235]

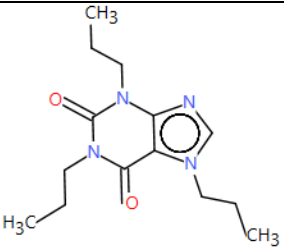
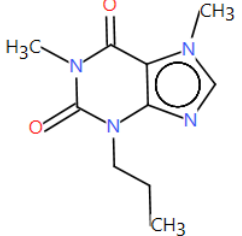
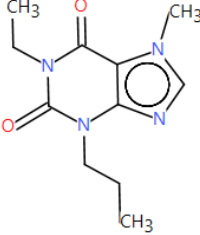
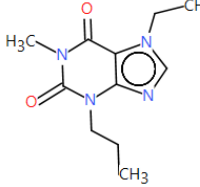
				henyl)-2 <i>E</i> ,6 <i>E</i> -heptadienoic acid pyrrolidylamide;			
16.14	55038-30-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Guineesine; Pipyahyine; (2 <i>E</i> ,4 <i>E</i> ,12 <i>E</i> )-13-(1,3-Benzodioxol-5-yl)- <i>N</i> -(2-methylpropyl)trideca-2,4,12-trienamide	<chem>CC(C)CNC(=O)/C=C/C=C/C/CCCCC/C=C/C1=CC2=C(C=C1)OCO2</chem>		<a href="https://foodb.ca/compounds/FDB006627">https://foodb.ca/compounds/FDB006627</a> [234, 236]
16.15	88660-10-0	8047465	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Pipernonaline; (2 <i>E</i> ,8 <i>E</i> )-9-(1,3-Benzodioxol-5-yl)-1-piperidin-1-ylnona-2,8-dien-1-one	<chem>C1CCN(CC1)C(=O)/C=C/C/CCCC/C=C/C2=CC3=C(C=C2)OCO3</chem>		[297]
17	83-48-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>(3-beta)-Stigmasta-5,22-dien-3-ol</b>	<chem>CCC(C=CC(C)C1CCC2C3CC=C4CC(O)CCC4(C)C3CCC12C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB001936">https://foodb.ca/compounds/FDB001936</a> [16,148]
17.1	83-46-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	beta-Sitosterol	<chem>CCC(CCC(C)C1CCC2C3CC=C4CC(O)CCC4(C)C3CCC12C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB012362">https://foodb.ca/compounds/FDB012362</a> [96]
17.2	521-17-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Androstenediol	<chem>CC12CCC3C(CC=C4CC(O)CCC34C)C1CCC2O</chem>		<a href="https://foodb.ca/compounds/FDB023228">https://foodb.ca/compounds/FDB023228</a> [97]

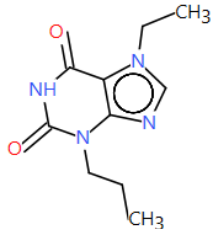
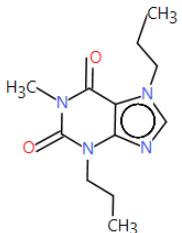
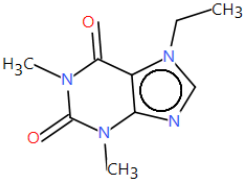
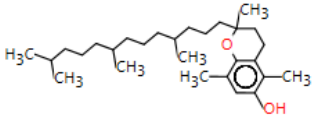
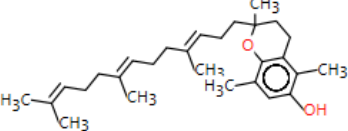
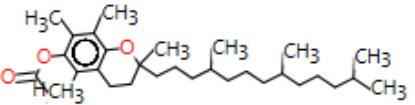
17.3	474-73-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cerebrosterol	<chem>CC(C)C(O)CCC(C)C1CC C2C3CC=C4CC(O)CCC4( C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB022611">https://foodb.ca/compounds/FDB022611</a> [98]
17.4	566-27-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7beta-Hydroxycholesterol	<chem>CC(C)CCCC(C)C1CCC2 C3C(O)C=C4CC(O)CCC4 (C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB023832">https://foodb.ca/compounds/FDB023832</a> [99]
17.5	80-99-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Lathosterol	<chem>CC(C)CCCC(C)C1CCC2 C1(CCC3C2=CCC4C3(C CC(C4)O)C)C</chem>		<a href="https://foodb.ca/compounds/FDB022463">https://foodb.ca/compounds/FDB022463</a> [100]
17.6	481-14-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Isofucosterol	<chem>CC=C(CCC(C)C1CCC2C 3CC=C4CC(O)CCC4(C)C 3CCC12C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB012493">https://foodb.ca/compounds/FDB012493</a> [101]
17.7	64907-22-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7alpha,25-Dihydroxycholesterol	<chem>CC(CCCC(C)(C)O)C1CC C2C3C(O)C=C4CC(O)CC C4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB023874">https://foodb.ca/compounds/FDB023874</a> [102]

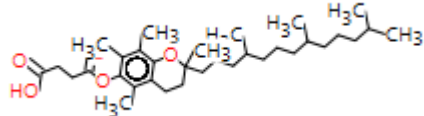
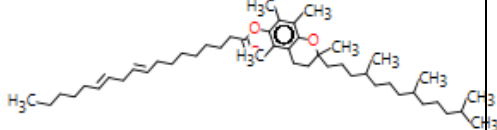
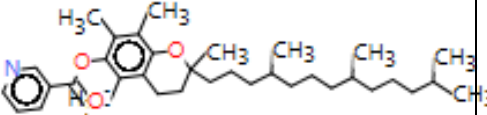
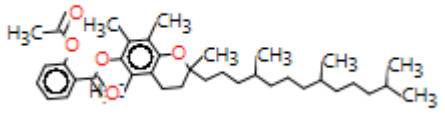
17.8	17954-98-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	22R-Hydroxycholesterol	<chem>CC(C)CCC(O)C(C)C1CC2C3CC=C4CC(O)CCC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB023285">https://foodb.ca/compounds/FDB023285</a> [103]
17.9	70741-38-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	8-Dehydrocholesterol	<chem>CC(C)CCCC(C)C1CCC2C3CC=C4CC(O)CCC4(C)C=3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB022805">https://foodb.ca/compounds/FDB022805</a> [104]
17.10		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	20a-Hydroxy cholesterol	<chem>CC(C)CCCC(C)(O)C1CC2C3CC=C4CC(O)CCC4(C)C3CCC12C</chem>		[105]
17.11	4725-24-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cholest-5-ene-3beta,7alpha,26-triol	<chem>CC(CO)CCCC(C)C1CCC2C3C(O)C=C4CC(O)CCC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB023875">https://foodb.ca/compounds/FDB023875</a> [106]
17.12	474-62-4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ergost-5-en-3.beta.-ol, (24R)-	<chem>CC(C)C(C)CCC(C)C1CC2C3CC=C4CC(O)CCC4(C)C3CCC12C</chem>		[107]

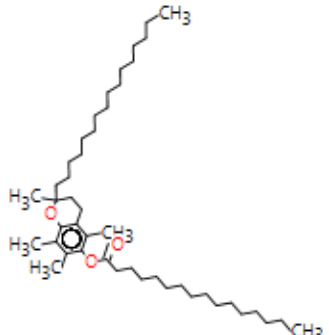
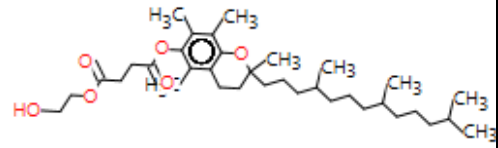
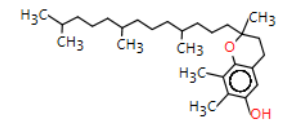
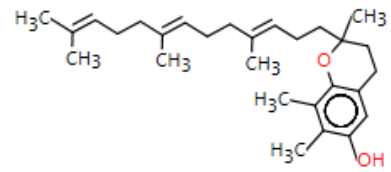
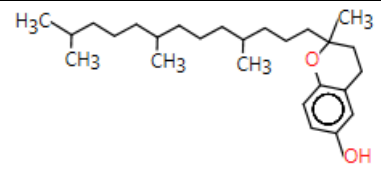
17.13	481-18-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	alpha-Spinasterol	<chem>CCC(C=CC(C)C1CCC2C3=CCC4CC(O)CCC4(C)C3CCC12C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB003992">https://foodb.ca/compounds/FDB003992</a> [108]
17.14	1715-86-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7-Dehydrodesmosterol	<chem>CC(CCC=C(C)C)C1CCC2C3=CC=C4CC(O)CCC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB030623">https://foodb.ca/compounds/FDB030623</a> [109]
17.15	23582-83-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-Dehydroepisterol	<chem>CC(C)C(=C)CCC(C)C1CC2C3=CC=C4CC(O)CC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB024117">https://foodb.ca/compounds/FDB024117</a> [110]
17.16	23290-26-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	delta7-Avenasterol	<chem>CC=C(CCC(C)C1CCC2C3=CCC4CC(O)CCC4(C)C3CCC12C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB030685">https://foodb.ca/compounds/FDB030685</a> [111]
17.17	481-25-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Lophenol	<chem>CC(C)CCCC(C)C1CCC2C3=CCC4C(C)C(O)CCC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB012028">https://foodb.ca/compounds/FDB012028</a> [112]
18	83-67-0	201494 2	FEMA number: 3591 FEMA GRAS number: 11 JECFA number: FL No: 16.032 CoE No:	<b>Theobromine; 1H-Purine-2,6- dione,_3,7- dihydro-3,7- dimethyl-;</b>	<chem>CN1C(=O)NC(=O)c2c1ncn2C</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=THEOBROMINE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=THEOBROMINE</a>

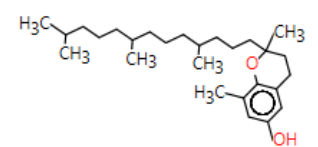
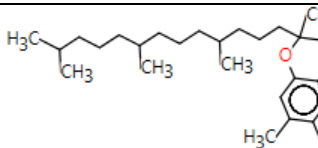
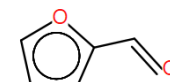
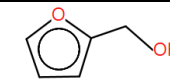
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18.1	41078-02-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Enprofylline	<chem>CCCN1C(=O)NC(=O)c2[nH]cnc12</chem>		UNDER DEVELOPMENT	
18.2	118024-67-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Methyl-3-propylxanthine	<chem>CCCN1C(=O)N(C)C(=O)c2[nH]cnc12</chem>		UNDER DEVELOPMENT	
18.3	102284-72-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Isopropyl-1-methyl xanthine	<chem>CC(C)N1C(=O)N(C)C(=O)c2[nH]cnc12</chem>		UNDER DEVELOPMENT	

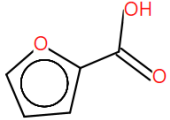
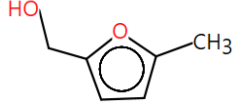
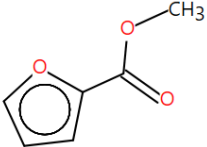
18.4			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,3,7- Tripropylxanthine	<chem>CCCN1C(=O)N(CCC)c2n cn(CCC)c2C1=O</chem>		UNDER DEVELOPMENT
18.5	7464-76- 8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,7-Dimethyl-3- propylpurine-2,6- dione	<chem>CCCN1C(=O)N(C)C(=O)c 2c1ncn2C</chem>		UNDER DEVELOPMENT
18.6			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Ethyl-7-methyl- 3-propyl-3,7- dihydro-purine- 2,6-dione	<chem>CCCN1C(=O)N(CC)C(=O )c2c1ncn2C</chem>		UNDER DEVELOPMENT
18.7			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7-Ethyl-1-methyl- 3-propyl-3,7- dihydro-purine- 2,6-dione	<chem>CCCN1C(=O)N(C)C(=O)c 2c1ncn2CC</chem>		UNDER DEVELOPMENT

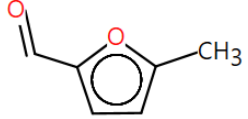
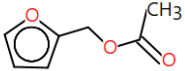
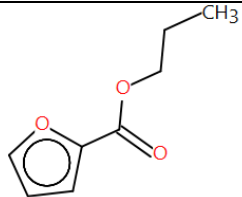
18.8			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7-Ethyl-3-propyl- 3,7-dihydro- purine-2,6-dione	<chem>CCCN1C(=O)NC(=O)c2c1ncn2CC</chem>		UNDER DEVELOPMENT
18.9	121875- 96-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1H-Purine-2,6- dione, 3,7- dihydro-1-methyl- 3,7-dipropyl-	<chem>CCCN1C(=O)N(C)C(=O)c2c1ncn2CCC</chem>		UNDER DEVELOPMENT
18.10	23043- 88-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7-Ethyl Theophylline	<chem>CCn1cnc2N(C)C(=O)N(C)C(=O)c12</chem>		UNDER DEVELOPMENT
19	1406-66- 2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>Tocopherols</b>	<chem>CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2c(C)c(O)cc(C)c2O1</chem>		<a href="https://foodb.ca/compounds/FDB002431">https://foodb.ca/compounds/FDB002431</a> [18,150]
19.1	490-23-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	epsilon-Tokoferol	<chem>CC(C)=CCCC(C)=CCCC(C)=CCCC1(C)CCc2c(C)c(O)cc(C)c2O1</chem>		<a href="https://foodb.ca/compounds/FDB093543">https://foodb.ca/compounds/FDB093543</a> [113]
19.2	58-95-7		FEMA number: FEMA GRAS number: JECFA number: FL No:	alpha-Tocopherol acetate	<chem>CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2c(C)c(OC(C)=O)c(C)c(C)c2O1</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TOCOPHE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TOCOPHE</a>

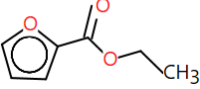
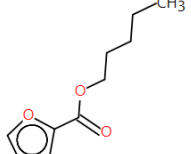
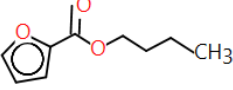
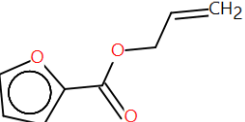
			CoE No:				<a href="#">ROLACETATE</a>
							[114]
19.3	4345-03-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	D-alpha-Tocopherol succinate	<chem>CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2c(C)c(OC(=O)CCC(O)=O)c(C)c(C)c2O1</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ALPHATOCOPHEROLACID_SUCCINATE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ALPHATOCOPHEROLACID_SUCCINATE</a>
19.4	36148-84-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	D-alpha-Tocopherol linoleate	<chem>CCCCC=CCC=CCCCCCCC(=O)Oc1c(C)c(C)c2OC(C)(CCCC(C)CCCC(C)CCCC(C)C)CCc2c1C</chem>		UNDER DEVELOPMENT
19.5	86362-36-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl nicotinate	<chem>CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2c(C)c(OC(=O)c3ccnc3)c(C)c(C)c2O1</chem>		UNDER DEVELOPMENT
19.6	34617-32-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\alpha$ -Tocopheryl <i>o</i> -acetoxybenzoate	<chem>CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2c(C)c(OC(=O)c3ccccc3OC(C)=O)c(C)c(C)c2O1</chem>		UNDER DEVELOPMENT

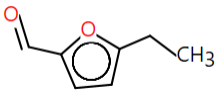
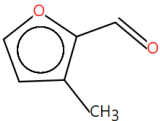
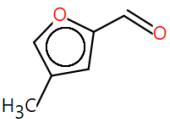
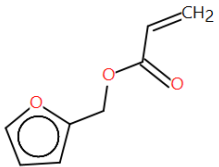
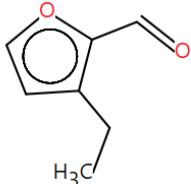
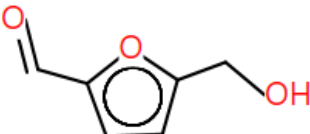
19.7	34562-29-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-1-benzopyran-6-yl hexadecanoate	CCCCCCCCCCCCCCCCC1(CCC2=C(O1)C(=C(C(=C2C)OC(=O)CCCCCCC(C)C)C)C		UNDER DEVELOPMENT
19.8			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Tocophersolan	CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2c(C)c(OC(=O)CCC(=O)OCCO)c(C)c(C)c2O1		UNDER DEVELOPMENT
20	7616-22-0	2315234	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\gamma$ -Tocopherol	CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2cc(O)c(C)c(C)c2O1		<a href="https://foodb.ca/compounds/FDB002431">https://foodb.ca/compounds/FDB002431</a> [19]
20.1			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3,4-Dihydro-2,7,8-trimethyl-2-[(3E,7E)-4,8,12-trimethyl-3,7,11-tridecatrienyl]-2H-1-benzopyran-6-ol	CC(C)=CCCC(C)=CCCC(C)=CCCC1(C)CCc2cc(O)c(C)c(C)c2O1		<a href="https://foodb.ca/compounds/FDB001298">https://foodb.ca/compounds/FDB001298</a> [115]
20.2			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	D-Desmethyltocopherol	CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2cc(O)ccc2O1		<a href="https://foodb.ca/compounds/FDB093542">https://foodb.ca/compounds/FDB093542</a> [116]

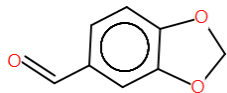
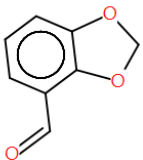
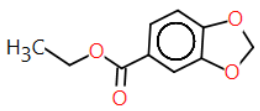
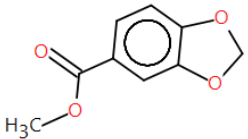
21	119-13-1	204299 0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>2,8-Dimethyl-2-(4,8,12-trimethyltridecyl)-3,4-dihydro-2H-chromen-6-ol; d-Tocopherol</b>	<chem>CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2cc(O)c(C)c2O1</chem>		[20,151]
21.1	91-86-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	eta-Tocopherol	<chem>CC(C)CCCC(C)CCCC(C)CCCC1(C)CCc2cc(O)c(C)c2O1</chem>		UNDER DEVELOPMENT
22	98-01-1	202627 7	FEMA number: 2489 FEMA GRAS number: 3 JECFA number: 450 FL No: 13.018 CoE No: 2014	<b>Furfural</b>	<chem>O=Cc1ccco1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURAL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURAL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB004219">https://foodb.ca/compounds/FDB004219</a> [21,153]
22.1	98-00-0		FEMA number: 2491 FEMA GRAS number: 3, 25 JECFA number: 451 FL No: 13.019 CoE No: 2023	Furfuryl alcohol	<chem>C1=COC(=C1)CO</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYLALCOHOL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYLALCOHOL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

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22.2	88-14-2		FEMA number: FEMA GRAS number: JECFA number: FL No: 13.136 CoE No: 10098	2-Furoic acid	<chem>OC(=O)c1ccco1</chem>		[118] <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
22.3	3857-25-8		FEMA number: 4544 FEMA GRAS number: 24 JECFA number: 2099 FL No: CoE No:	5-Methylfurfuryl alcohol	<chem>Cc1ccc(CO)o1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLURFURYLALCOHOL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLURFURYLALCOHOL</a> [119]
22.4	611-13-2		FEMA number: 2703 FEMA GRAS number: 3, 25 JECFA number: 746 FL No: 13.002 CoE No: 358	Methyl 2-furoate	<chem>COC(=O)c1ccco1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLUROATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLUROATE</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB000952">https://foodb.ca/compounds/FDB000952</a> [120,154]

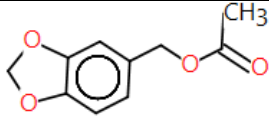
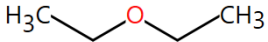
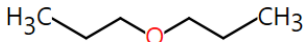
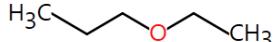
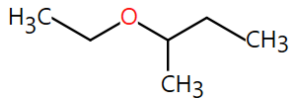
22.5	620-02-0	FEMA number: 2702 FEMA GRAS number: 3, 25 JECFA number: 745 FL No: 13.001 CoE No: 119	5-Methylfurfural	<chem>Cc1ccc(C=O)o1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYL FURFURAL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYL FURFURAL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB010991">https://foodb.ca/compounds/FDB010991</a>  [121]
22.6	623-17-6	FEMA number: 2490 FEMA GRAS number: 3, 25 JECFA number: 739 FL No: 13.128 CoE No: 2065	Furfuryl acetate	<chem>CC(=O)OCc1ccco1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURY LACETATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURY LACETATE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/compounds/FDB012559">https://foodb.ca/compounds/FDB012559</a>  [122]
22.7	615-10-1	FEMA number: 2946 FEMA GRAS number: 3 JECFA number: 747 FL No: 13.003 CoE No: 359	Propyl 2-furoate	<chem>CCCOC(=O)c1ccco1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPYL FUROATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPYL FUROATE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

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							[123]
22.8	614-99-3	FEMA number: FEMA GRAS number: JECFA number: FL No: 13.122 CoE No: 10588	Ethyl 2-furoate	CCOC(=O)c1ccco1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>	[124]
22.9	1334-82-3	FEMA number: 2072 FEMA GRAS number: 3 JECFA number: 748 FL No: 13.025 CoE No: 2109	Amyl 2-furoate	CCCCCOC(=O)c1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=AMYLFUROATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=AMYLFUROATE</a>	[125]
22.10	583-33-5	FEMA number: FEMA GRAS number: JECFA number: FL No: 13.102 CoE No:	Butyl 2-furoate	CCCCOC(=O)c1ccco1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>	[126]
22.11	4208-49-5	FEMA number: 2030 FEMA GRAS number: 3 JECFA number: 21 FL No: 13.004 CoE No: 360	Allyl 2-furoate	C=CCOC(=O)c1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ALLYLFUROATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ALLYLFUROATE</a>	<a href="https://eur-lex.europa.eu/legal-">https://eur-lex.europa.eu/legal-</a>

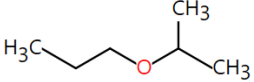
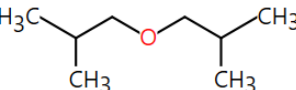
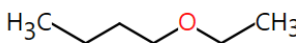
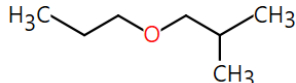
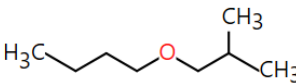
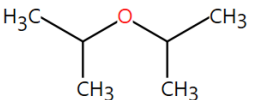
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							[127]
22.12	23074-10-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-Ethyl-2-furaldehyde	<chem>CCc1ccc(C=O)o1</chem>		UNDER DEVELOPMENT
22.13	33342-48-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Methyl-2-furaldehyde	<chem>Cc1ccoc1C=O</chem>		UNDER DEVELOPMENT
22.14	33342-49-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-methylfuran-2-carbaldehyde	<chem>Cc1coc(C=O)c1</chem>		UNDER DEVELOPMENT
22.15	10525-17-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Furfuryl acrylate	<chem>C=CC(=O)OCc1ccco1</chem>		UNDER DEVELOPMENT
22.16	1781941-14-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ethylfurfural	<chem>CCc1ccoc1C=O</chem>		UNDER DEVELOPMENT
22.17	67-47-0	2006549	FEMA number: FEMA GRAS number: JECFA number: FL No: 13.139	5-Hydroxymethylfurfural	<chem>C1=C(OC(=C1)C=O)CO</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

			CoE No: 11112				<a href="https://foodb.ca/compounds/FDB0127">72</a> <a href="https://foodb.ca/compounds/FDB0127">https://foodb.ca/compounds/FDB0127</a> [308]
23	120-57-0	204409 7	FEMA number: 2911 FEMA GRAS number: 3, 25 JECFA number: 896 FL No: 05.016 CoE No: 104	Piperonal	<chem>O=Cc1ccc2OCOc2c1</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERONAL">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERONAL</a> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> <a href="https://foodb.ca/compounds/FDB010553">https://foodb.ca/compounds/FDB010553</a> [22]
23.1	7797-83-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,3-Benzodioxole-4-carbaldehyde	<chem>O=Cc1ccc2OCOc12</chem>		UNDER DEVELOPMENT
23.2	6951-08-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ethyl benzo[d][1,3]dioxole-5-carboxylate	<chem>CCOC(=O)c1ccc2OCOc2c1</chem>		UNDER DEVELOPMENT
23.3	326-56-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Methyl piperonylate	<chem>COC(=O)c1ccc2OCOc2c1</chem>		UNDER DEVELOPMENT

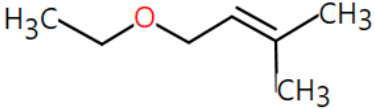
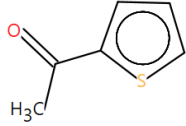
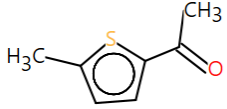
23.4	136-63-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Bucarpolate	<chem>CCCCOCCOCCOC(=O)c1ccc2OCoc2c1</chem>		UNDER DEVELOPMENT
23.5	74098-26-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Isobutyl piperonylate	<chem>CC(C)COC(=O)c1ccc2OCoc2c1</chem>		UNDER DEVELOPMENT
23.6	94-53-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Piperonylic acid	<chem>OC(=O)c1ccc2OCoc2c1</chem>		UNDER DEVELOPMENT
23.7	533-31-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Sesamol	<chem>Oc1ccc2OCoc2c1</chem>		<a href="https://foodb.ca/compounds/FDB011975">https://foodb.ca/compounds/FDB011975</a> [128]
23.8	495-76-1	207808 4	FEMA number: FEMA GRAS number: JECFA number: FL No: 02.205 CoE No: 10306	Piperonyl alcohol	<chem>C1OC2=C(O1)C=C(C=C2)CO</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [309]
23.9	5461-08-5	226745 3	FEMA number: 2913 FEMA GRAS number: 3, 25 JECFA number: 895 FL No: 09.430 CoE No: 305	Piperonyl isobutyrate; Piperonyl 2-methylpropanoate	<chem>CC(C)C(=O)OCC1=CC2=C(C=C1)OC2=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERONYLISOBUTYRATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERONYLISOBUTYRATE</a>  <a href="https://eur-lex.europa.eu/legal-">https://eur-lex.europa.eu/legal-</a>

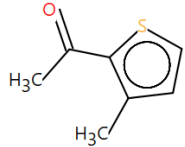
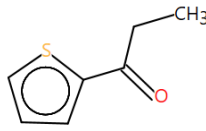
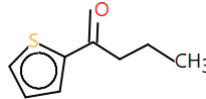
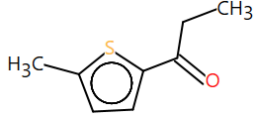
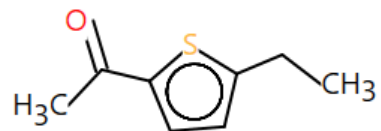
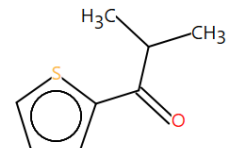
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							[310]
23.10	326-61-4	2063125	FEMA number: 2912 FEMA GRAS number: 3, 25 JECFA number: 894 FL No: 09.220 CoE No: 2068	Piperonyl acetate	<chem>CC(=O)OCC1=CC2=C(C=C1)OCO2</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERONYLACETATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERONYLACETATE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
							[311]
24	60-29-7	2004672	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Diethyl ether	<chem>CCOCC</chem>		<a href="https://foodb.ca/com pounds/FDB004482">https://foodb.ca/com pounds/FDB004482</a>
							[23]
24.1	111-43-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Dipropyl ether	<chem>CCCOCCC</chem>		UNDER DEVELOPMENT
24.2	628-32-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ethyl propyl ether	<chem>CCCOCC</chem>		UNDER DEVELOPMENT
24.3	2679-87-0		FEMA number: 3131 FEMA GRAS number: 4	<i>sec</i> -Butyl ethyl ether	<chem>CCOC(C)CC</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm</a>

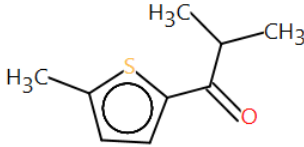
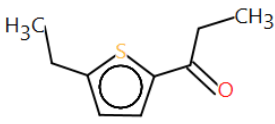
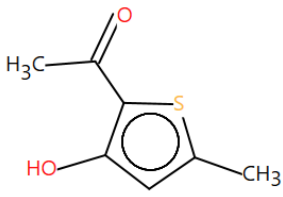
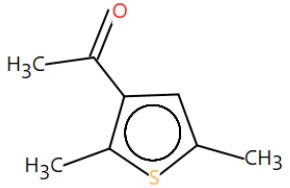
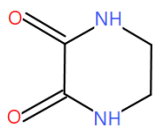
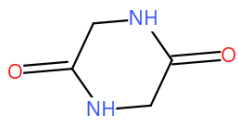
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24.4	3073-92-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Butyl propyl ether	CCCCOCCC		UNDER DEVELOPMENT
24.5	142-96-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Dibutyl ether	CCCCOCCCC		UNDER DEVELOPMENT
24.6	6863-58-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Di- <i>sec</i> -butyl ether	CCC(C)OC(C)CC		UNDER DEVELOPMENT
24.7	1860-27-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-(1-Methylethoxy) butane	CCCCOC(C)C		UNDER DEVELOPMENT
24.8	625-54-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ethyl isopropyl ether	CCOC(C)C		UNDER DEVELOPMENT

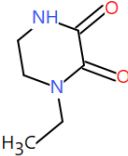
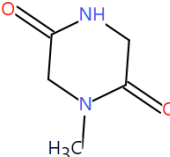
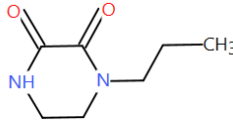
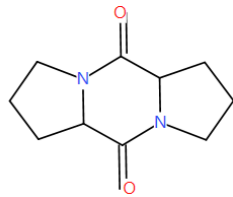
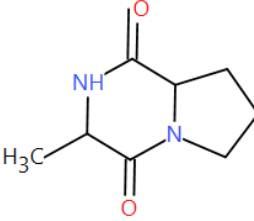
24.9	627-08-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Isopropyl propyl ether	CCCOC(C)C		UNDER DEVELOPMENT
24.10	628-55-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Diisobutyl ether	CC(C)COCC(C)C		UNDER DEVELOPMENT
24.11	628-81-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Butyl ethyl ether	CCCCOCC		UNDER DEVELOPMENT
24.12	15268-49-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-1-propoxy-propane	CCCOCC(C)C		UNDER DEVELOPMENT
24.13	17071-47-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-(2-Methylpropoxy)butane	CCCCOCC(C)C		UNDER DEVELOPMENT
24.14	108-20-3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Diisopropyl ether	CC(C)OC(C)C		<a href="https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/2123">https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/2123</a>

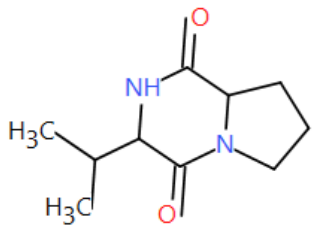
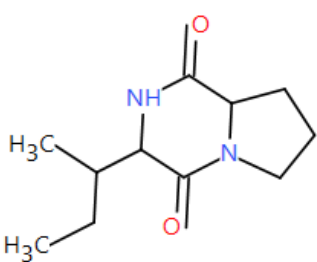
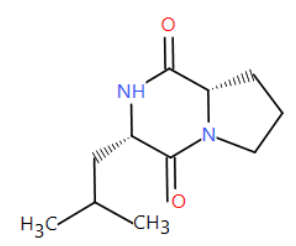
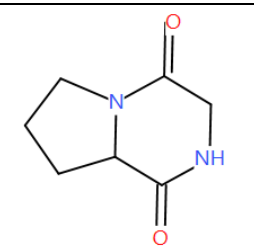
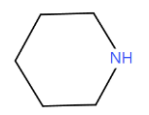
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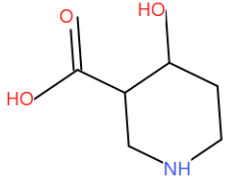
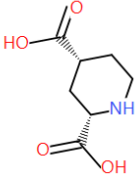
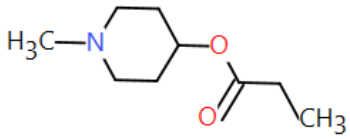
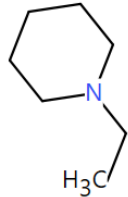
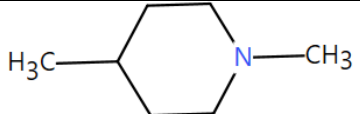
24.15	22094-00-4	606931 4	FEMA number: 3777 FEMA GRAS number: 16 JECFA number: 1232 FL No: 03.019 CoE No:	Prenyl ethyl ether	CCOCC=C(C)C		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHOXYMETHYLTHIOPHENE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHOXYMETHYLTHIOPHENE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [313]
25	88-15-3	201804 6	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.040 CoE No: 11728	2-Acetyl thiophene	CC(=O)c1cccs1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  <a href="https://foodb.ca/com pounds/FDB011134">https://foodb.ca/com pounds/FDB011134</a>  [24,154]
25.1	13679-74-8		FEMA number: 4643 FEMA GRAS number: 24 JECFA number: 2107 FL No: CoE No:	2-Acetyl-5-methylthiophene	CC(=O)c1ccc(C)s1		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLMETHYLTHIOPHENE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLMETHYLTHIOPHENE</a>  <a href="https://foodb.ca/com pounds/FDB011131">https://foodb.ca/com pounds/FDB011131</a>  [131, 295]

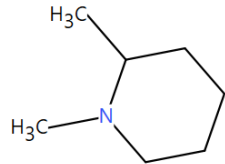
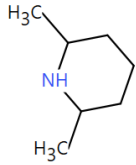
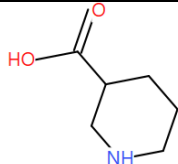
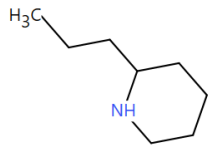
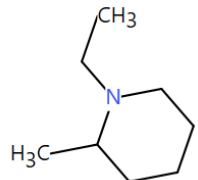
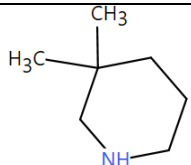
25.2	13679-72-6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Acetyl-3-methylthiophene	<chem>CC(=O)c1sccc1C</chem>		UNDER DEVELOPMENT
25.3	13679-75-9	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.097 CoE No: 11635	2-Propionylthiophene	<chem>CCC(=O)c1cccs1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [132]
25.4	5333-83-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-n-Butyrylthiophene	<chem>CCCC(=O)c1cccs1</chem>		UNDER DEVELOPMENT
25.5	59303-13-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-5-propionylthiophene	<chem>CCC(=O)c1ccc(C)s1</chem>		UNDER DEVELOPMENT
25.6	18761-46-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-(5-Ethylthiophen-2-yl)ethanone	<chem>CCc1ccc(s1)C(C)=O</chem>		UNDER DEVELOPMENT
25.7	36448-60-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-1-(thiophen-2-yl)propan-1-one	<chem>CC(C)C(=O)c1cccs1</chem>		UNDER DEVELOPMENT

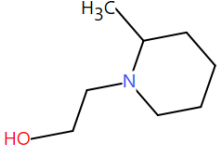
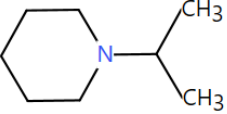
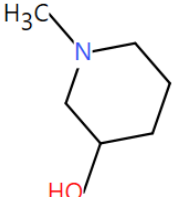
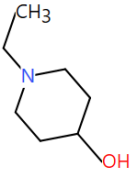
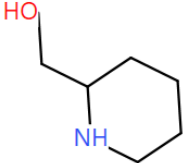
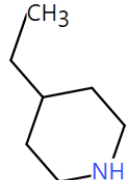
25.8	94199-67-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl-1-(5-methyl-2-thienyl)propan-1-one	<chem>CC(C)C(=O)c1ccc(C)s1</chem>		UNDER DEVELOPMENT
25.9	108223-66-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-Ethyl-2-propiothienone	<chem>CCC(=O)c1ccc(CC)s1</chem>		UNDER DEVELOPMENT
25.10	133860-42-1		FEMA number: 4142 FEMA GRAS number: 22 JECFA number: 1750 FL No: CoE No:	1-(3-Hydroxy-5-methyl-2-thienyl)ethanone	<chem>CC(=O)c1sc(C)cc1O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYMETHYLTHIENYLETHANONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYMETHYLTHIENYLETHANONE</a> [133, 295]
25.11	2530-10-1	2197795	FEMA number: FEMA GRAS number: JECFA number: 1051 FL No: 15.024 CoE No: 11603	3-Acetyl-2,5-dimethylthiophene	<chem>CC1=CC(=C(S1)C)C(=O)C</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [295, 296]
26	13092-86-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,3-Diketopiperazine	<chem>O=C1NCCNC1=O</chem>		[25]
26.1	106-57-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,5-Piperazinedione	<chem>O=C1CNC(=O)CN1</chem>		UNDER DEVELOPMENT

26.2	59702-31-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Ethylpiperazine-2,3-dione	CCN1CCNC(=O)C1=O		UNDER DEVELOPMENT
26.3	5625-52-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Methylpiperazine-2,5-dione	CN1CC(=O)NCC1=O		UNDER DEVELOPMENT
26.4	59702-32-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Propyl-2,3-piperazinedione	CCCN1CCNC(=O)C1=O		UNDER DEVELOPMENT
26.5	6708-06-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cyclo(Pro-Pro); Proline anhydride; Octahydro-5H,10H-dipyrrolo[1,2-a:1',2'-d]pyrazine-5,10-dione	C1CC2C(=O)N3CCCC3C(=O)N2C1		[299]
26.6	65556-33-4	9896502	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cyclo(Pro-Ala); Cyclo-Ala-Pro-diketopiperazine; 3-Methylhexahydro pyrrolo[1,2-a]pyrazine-1,4-dione;	CC1C(=O)N2CCCC2C(=O)N1		<a href="https://foodb.ca/compounds/FDB010658">https://foodb.ca/compounds/FDB010658</a> [299, 300]

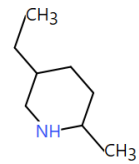

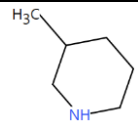
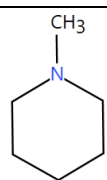
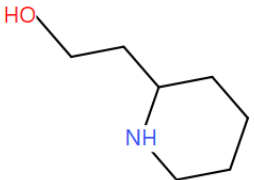
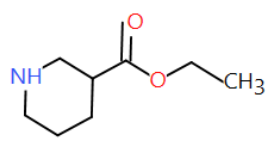
26.7	5654-87-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cyclo(Pro-Val); 3-isopropyl- hexahydropyrrolo [1,2-a]pyrazine- 1,4-dione	<chem>CC(C)C1C(=O)N2CCCC2C(=O)N1</chem>		[299]
26.8	58917-56-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cyclo(Pro-Ile); Cyclo-Ile-Pro- diketopiperazine; 3-butan-2-yl- 2,3,6,7,8,8a- hexahydropyrrolo [1,2-a]pyrazine- 1,4-dione	<chem>CCC(C)C1C(=O)N2CCCC2C(=O)N1</chem>		[299]
26.9	5654-86-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cyclo(Pro-Leu); 3- Isobutylhexahydr opyrrolo[1,2- a]pyrazine-1,4- dione	<chem>CC(C)CC1C(=O)N2CCCC2C(=O)N1</chem>		[299]
26.10	3705-27-9	9854305	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cyclo(Gly-L- Pro); (S)- Hexahydropyrrolo [1,2-a]pyrazine- 1,4-dione	<chem>C1CC2C(=O)NCC(=O)N2C1</chem>		[301]
27	110-89-4		FEMA number: 2908 FEMA GRAS number: 3 JECFA number: 1607 FL No: 14.010	<b>Piperidine</b>	<chem>C1CCNCC1</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERIDIN">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERIDIN</a>

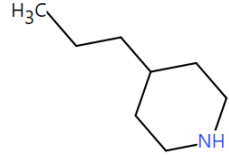
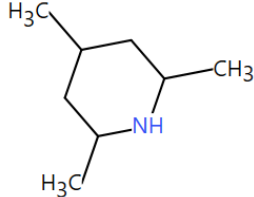
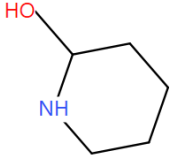
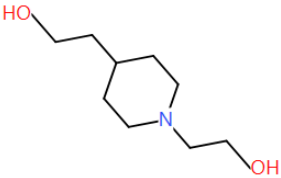
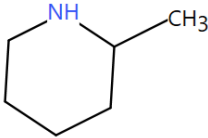
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27.1	126150-99-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Hydroxypiperidine-3-carboxylic acid	<chem>C1CNCC(C1O)C(=O)O</chem>		UNDER DEVELOPMENT	
27.2	85819-03-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,4-Piperidinedicarboxylic acid	<chem>OC(=O)C1CCNC(C1)C(=O)O</chem>		UNDER DEVELOPMENT	
27.3	80047-12-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	N-Methylpiperidine-4-yl propionate	<chem>CCC(=O)OC1CCN(C)CC1</chem>		UNDER DEVELOPMENT	
27.4	766-09-6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Ethylpiperidine	<chem>CCN1CCCCC1</chem>		UNDER DEVELOPMENT	
27.5	695-15-8	FEMA number: FEMA GRAS number: JECFA number:	1,4-Dimethylpiperidine	<chem>CC1CCN(C)CC1</chem>		UNDER DEVELOPMENT	

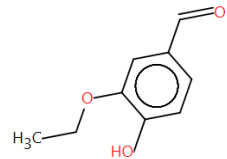
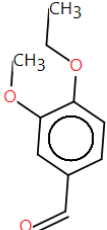
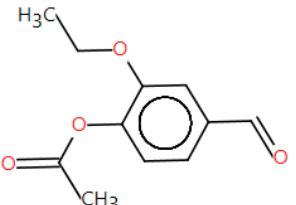
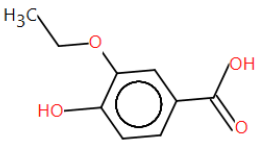
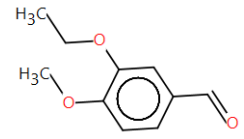
			FL No: CoE No:				
27.6	671-36-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1,2-Dimethylpiperidine	CC1CCCCN1C		UNDER DEVELOPMENT
27.7	504-03-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,6-Dimethylpiperidine	CC1CCCC(C)N1		UNDER DEVELOPMENT
27.8	498-95-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Piperidine-3-carboxylic acid	OC(=O)C1CCNC1		UNDER DEVELOPMENT
27.9	458-88-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Propylpiperidine	CCCC1CCCN1		UNDER DEVELOPMENT
27.10	766-52-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Ethyl-2-methylpiperidine	CCN1CCCCC1C		UNDER DEVELOPMENT
27.11	1193-12-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3,3-Dimethylpiperidine	CC1(C)CCNC1		UNDER DEVELOPMENT

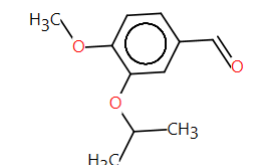
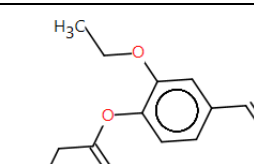
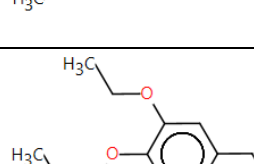
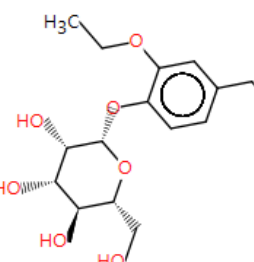
27.12	934-90-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	alpha-Methyl-1- piperidineethanol	CC1CCCCN1CCO		UNDER DEVELOPMENT
27.13	766-79-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>N</i> - Isopropylpiperidi ne	CC(C)N1CCCCC1		UNDER DEVELOPMENT
27.14	3554-74- 3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Hydroxy-1- methylpiperidine	CN1CCCC(O)C1		UNDER DEVELOPMENT
27.15	3518-83- 0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>N</i> -Ethyl-4- hydroxypiperidine	CCN1CCC(O)CC1		UNDER DEVELOPMENT
27.16	3433-37- 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2- Piperidinemethan ol	OCC1CCCCN1		UNDER DEVELOPMENT
27.17	3230-23- 7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Ethylpiperidine	CCC1CCNCC1		UNDER DEVELOPMENT

27.18	3105-95-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Pipecolic acid	<chem>OC(=O)C1CCCCN1</chem>		UNDER DEVELOPMENT
27.19	6659-34-3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Methyl-4-piperidyl acetate	<chem>CN1CCC(CC1)OC(C)=O</chem>		UNDER DEVELOPMENT
27.20	6457-49-4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Piperidinemethanol	<chem>OCC1CCNCC1</chem>		UNDER DEVELOPMENT
27.21	3040-44-6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Piperidinoethanol	<chem>OCCN1CCCCC1</chem>		UNDER DEVELOPMENT
27.22	533-15-3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-(1-Methylpiperidin-2-yl)ethanol	<chem>CN1CCCCC1CCO</chem>		UNDER DEVELOPMENT
27.23	106-52-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Methylpiperidin-4-ol	<chem>CN1CCC(O)CC1</chem>		UNDER DEVELOPMENT

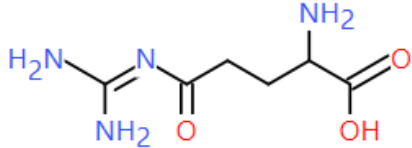
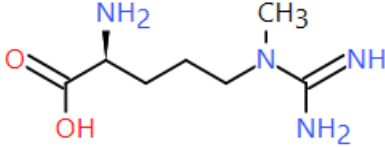
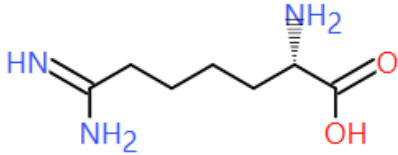
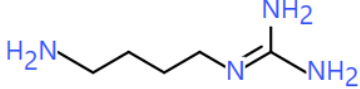
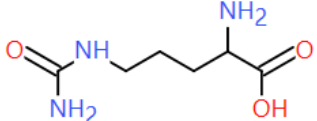
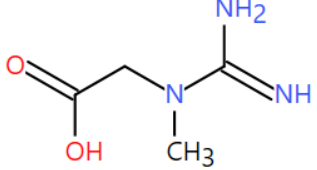
27.24	104-89-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-Ethyl-2- methylpiperidine	CCC1CCC(C)NC1		UNDER DEVELOPMENT
27.25	104-58-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1- Piperidinepropano 1	OCCCN1CCCCC1		UNDER DEVELOPMENT
27.26	626-56-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3- Methylpiperidine	CC1CCCNC1		UNDER DEVELOPMENT
27.27	626-67-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1- Methylpiperidine	CN1CCCCC1		UNDER DEVELOPMENT
27.28	1484-84- 0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-(2- Hydroxyethyl)pip eridine	OCCC1CCCCN1		UNDER DEVELOPMENT
27.29	5006-62- 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ethyl nipecotate	CCOC(=O)C1CCCNC1		UNDER DEVELOPMENT

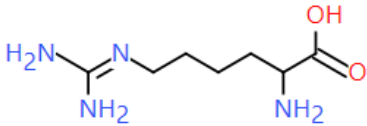
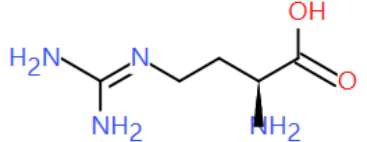
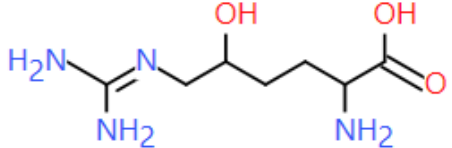
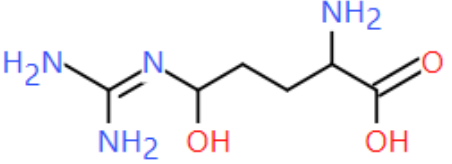
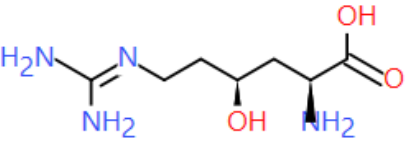
27.30	22398-09-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Propylpiperidine	CCCC1CCNCC1		UNDER DEVELOPMENT
27.31	21974-48-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,4,6-Trimethylpiperidine	CC1CC(C)NC(C)C1		UNDER DEVELOPMENT
27.32	45506-41-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Piperidinol	OC1CCCCN1		UNDER DEVELOPMENT
27.33	50325-75-2		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,2'-Piperidine-1,4-diyl diethanol; Piperidine-1,4-diethanol	OCCC1CCN(CCO)CC1		UNDER DEVELOPMENT
27.34	109-05-7	203642 1	FEMA number: 4244 FEMA GRAS number: 22 JECFA number: 1608 FL No: 14.133 CoE No:	2-Methylpiperidine; 2-Pipecoline	CC1CCCCN1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPIPERIDINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPIPERIDINE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  [302]

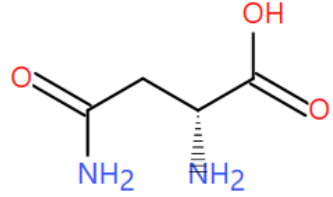
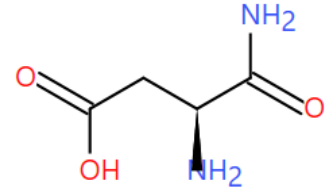
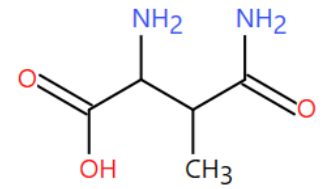
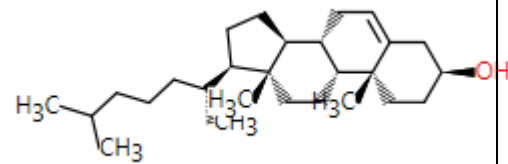
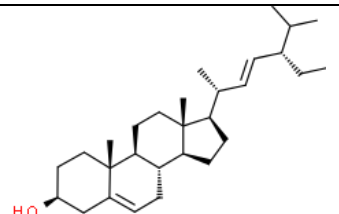
28	121-32-4	204464 7	FEMA number: 2464 FEMA GRAS number: 3 JECFA number: 893 FL No: 05.019 CoE No: 108	<b>Ethylvanillin</b>	<b>CCOc1cc(C=O)ccc1O</b>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLVANILLIN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLVANILLIN</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [27]
28.1	120-25-2		FEMA number: FEMA GRAS number: JECFA number: FL No: 05.066 CoE No: 703	4-Ethoxy-3-methoxybenzaldehyde	<b>CCOc1ccc(C=O)cc1OC</b>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [134]
28.2	72207-94-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Ethoxy-4-formylphenyl acetate	<b>CCOc1cc(C=O)ccc1OC(C)=O</b>		UNDER DEVELOPMENT
28.3	5438-38-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Ethoxy-4-hydroxybenzoic acid	<b>CCOc1cc(ccc1O)C(O)=O</b>		UNDER DEVELOPMENT
28.4	1131-52-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Ethoxy-4-methoxybenzaldehyde	<b>CCOc1cc(C=O)ccc1OC</b>		UNDER DEVELOPMENT

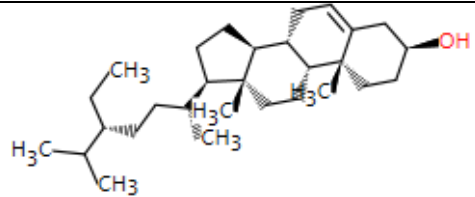
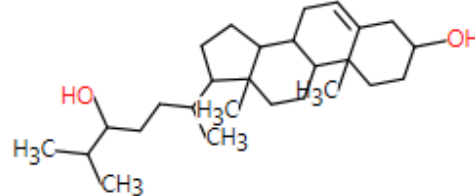
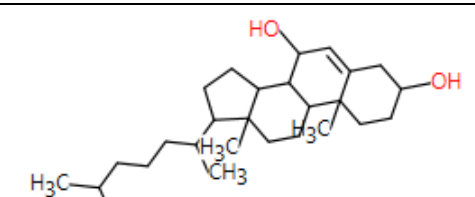
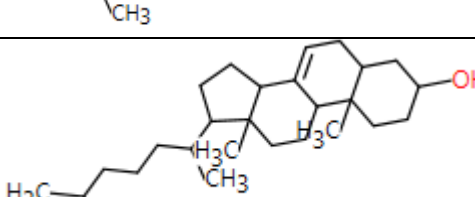
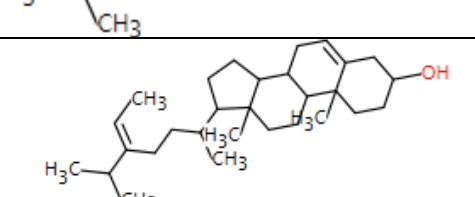
28.5	34123-66-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Isopropoxy-4-methoxybenzaldehyde	<chem>COc1ccc(C=O)cc1OC(C)C</chem>		UNDER DEVELOPMENT
28.6	159661-85-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Ethoxy-4-formylphenyl propionate	<chem>CCOc1cc(C=O)ccc1OC(=O)CC</chem>		UNDER DEVELOPMENT
28.7	188417-26-7		FEMA number: 3837 FEMA GRAS number: 18 JECFA number: 953 FL No: 09.933 CoE No:	Ethyl vanillin isobutyrate	<chem>CCOc1cc(C=O)ccc1OC(=O)C(C)C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLVANILLINISOBUTYRATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLVANILLINISOBUTYRATE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>  [135]
28.8	122397-96-0	6027693	FEMA number: 3801 FEMA GRAS number: 17 JECFA number: 892 FL No: 16.075 CoE No:	Ethyl vanillin $\beta$ -D-glucopyranoside; Ethyl vanillin glucoside	<chem>CCOC1=C(C=CC(=C1)C=O)OC2C(C(C(C(O2)CO)O)O)O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLVANILLINGLUCOPYRANOSIDE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLVANILLINGLUCOPYRANOSIDE</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

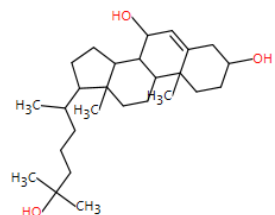
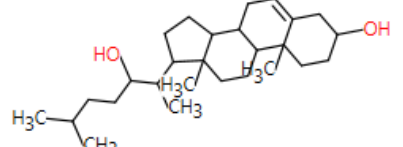
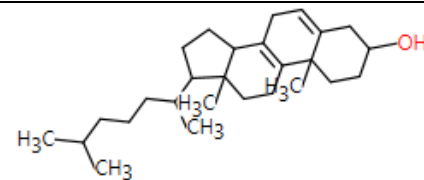
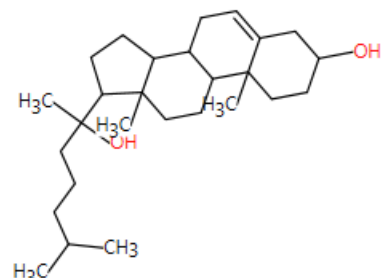
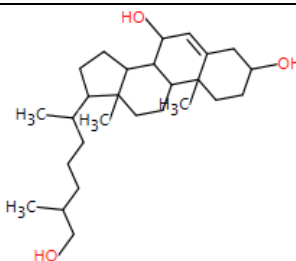


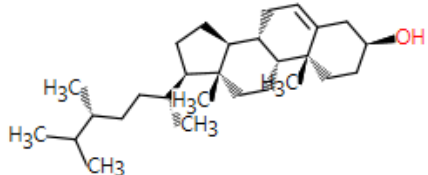
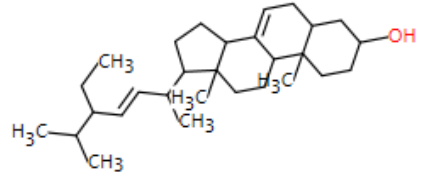
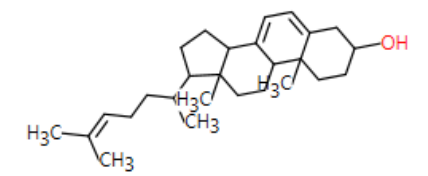
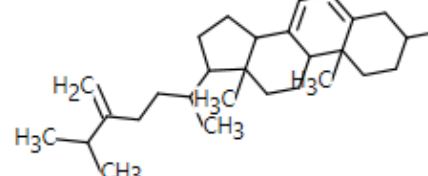
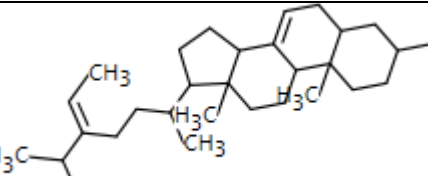
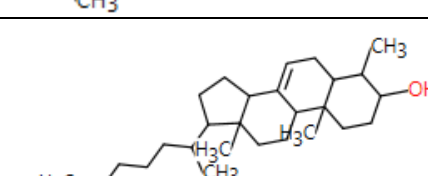
29.5			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Amino-5-(diaminomethylideneamino)-5-oxopentanoic acid	<chem>C(CC(=O)N=C(N)N)C(=O)O</chem>		UNDER DEVELOPMENT
29.6	77044-73-6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\delta$ -N-Methylarginine; N <sup>5</sup> -methyl-L-arginine; (2S)-2-amino-5-(N-methylcarbamimidamido)pentanoic acid	<chem>CN(CCCC(C(=O)O)N)C(=N)N</chem>		UNDER DEVELOPMENT
29.7	16377-00-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	L-Indospicine; (2S)-2,7-Diamino-7-iminoheptanoic acid	<chem>N[C@@H](CCCC(N)=N)C(=O)O</chem>		[238]
29.8	306-60-5	2061877	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Agmatine; 2-(4-Aminobutyl)guanidine; Argmatine	<chem>C(CCN=C(N)N)CN</chem>		<a href="https://foodb.ca/compounds/FDB008310">https://foodb.ca/compounds/FDB008310</a> [214]
29.9	372-75-8	2067596	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	L-citrulline; $\delta$ -Ureidonorvaline	<chem>C(CC(C(=O)O)N)CNC(=O)N</chem>		[317-318]
29.10	57-00-1	2003066	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Creatin; N-Amidinosarcosine ;	<chem>CN(CC(=O)O)C(=N)N</chem>		<a href="https://foodb.ca/compounds/FDB005403">https://foodb.ca/compounds/FDB005403</a> [215]

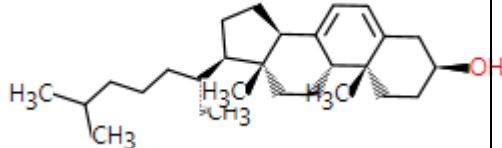
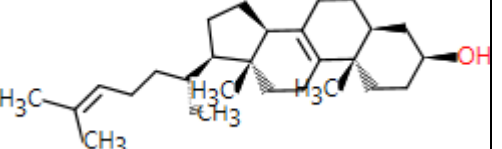
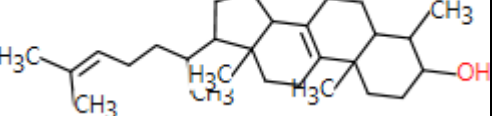
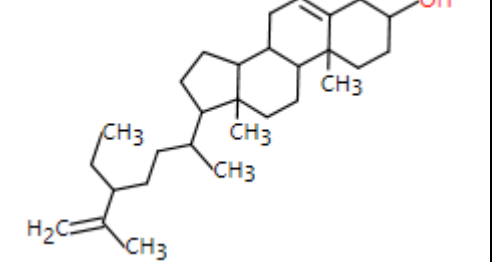
29.11	156-86-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>L</i> -Homoarginine	<chem>C(CCN=C(N)N)CC(C(=O)O)N</chem>		[238]
29.12	2978-24-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Amino-4-guanidinobutanoic acid	<chem>C(CN=C(N)N)C(C(=O)O)N</chem>		[238]
29.13		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-Hydroxy- <i>L</i> -homoarginine; (2 <i>S</i> )-2-Amino-6-(diaminomethylideneamino)-5-hydroxyhexanoic acid	<chem>C(CC(CN=C(N)N)O)C(C(=O)O)N</chem>		[238]
29.14		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-Hydroxy- <i>L</i> -arginine; $\delta$ -Hydroxy- <i>L</i> -arginine; (2 <i>S</i> )-2-Amino-5-(diaminomethylideneamino)-5-hydroxypentanoic acid	<chem>C(CC(N=C(N)N)O)C(C(=O)O)N</chem>		[238]
29.15	1622-18-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(+)- $\gamma$ -Hydroxy- <i>L</i> -homoarginine; (2 <i>S</i> ,4 <i>R</i> )-2-Amino-6-(diaminomethylideneamino)-4-hydroxyhexanoic acid	<chem>C(CN=C(N)N)C(CC(C(=O)O)N)O</chem>		UNDER DEVELOPMENT

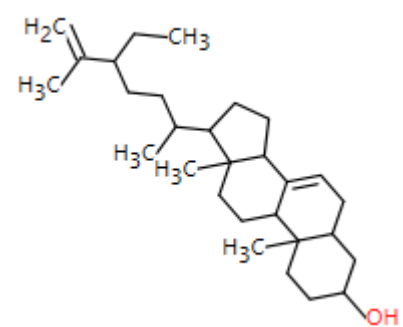
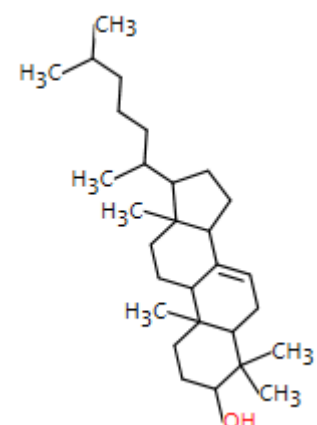
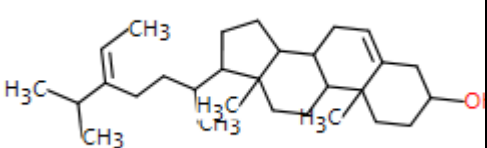
30	70-47-3	200735 9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>L-Asparagine; Aspartamic acid; (2S)-2,4- Diamino-4- oxobutanoic acid</b>	<chem>NC(CC(N)=O)C(O)=O</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ASPARAGINE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ASPARAGINE</a> [156]
30.1	28057-52-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>L</i> -Isoasparagine; (3S)-3,4-Diamino-4-oxobutanoic acid	<chem>C(C(C(=O)N)N)C(=O)O</chem>		UNDER DEVELOPMENT
30.2	50817-24-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\beta$ -Methyl-asparagine; 2,4-Diamino-3-methyl-4-oxobutanoic acid	<chem>CC(C(C(=O)O)N)C(=O)N</chem>		UNDER DEVELOPMENT
31	57-88-5	200353 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>Cholesterol; Cholest-5-en-3<math>\beta</math>-ol</b>	<chem>CC(C)CCCC(C)C1CCC2C3CC=C4CC(O)CCC4(C)C3CCC12C</chem>		UNDER DEVELOPMENT
31.1	83-48-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Stigmasterol; Stigmasta-5,22-dien-3 $\beta$ -ol	<chem>CCC(C=CC(C)C1CCC2C3CC=C4CC(O)CCC4(C)C3CCC12C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB001936">https://foodb.ca/compounds/FDB001936</a> [16,148]

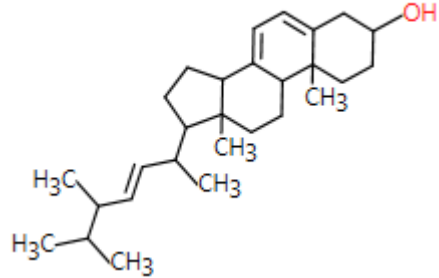
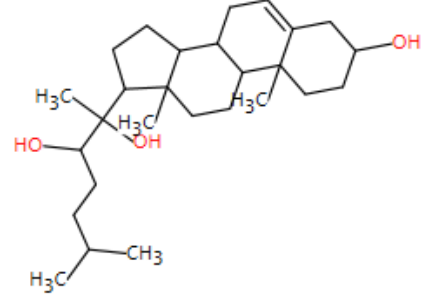
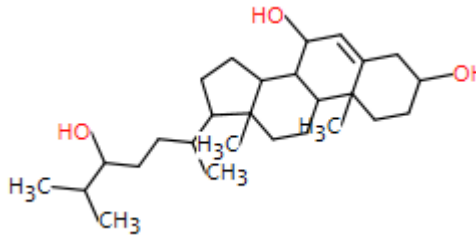
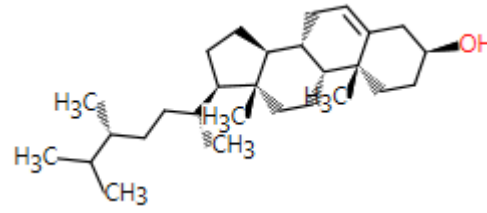
31.2	83-46-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\beta$ -Sitosterol	<chem>CCC(CCC(C)C1CCC2C1(CCC3C2CC=C4C3(CCC(C4)O)C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB012362">https://foodb.ca/compounds/FDB012362</a> [96]
31.3	474-73-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cerebrosterol	<chem>CC(C)C(O)CCC(C)C1CC2C3CC=C4CC(O)CCC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB022611">https://foodb.ca/compounds/FDB022611</a> [98]
31.4	566-27-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7 $\beta$ -Hydroxycholesterol	<chem>CC(C)CCCC(C)C1CCC2C3C(O)C=C4CC(O)CCC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB023832">https://foodb.ca/compounds/FDB023832</a> [99]
31.5	80-99-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Lathosterol	<chem>CC(C)CCCC(C)C1CCC2C1(CCC3C2=CCC4C3(C)CC(C4)O)C</chem>		<a href="https://foodb.ca/compounds/FDB022463">https://foodb.ca/compounds/FDB022463</a> [100]
31.6	481-14-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Isofucosterol	<chem>CC=C(CCC(C)C1CCC2C3CC=C4CC(O)CCC4(C)C3CCC12C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB012493">https://foodb.ca/compounds/FDB012493</a> [101]

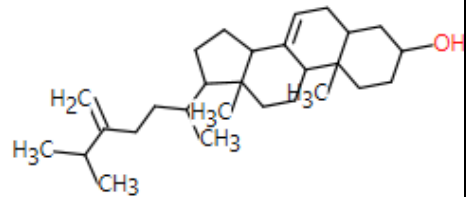
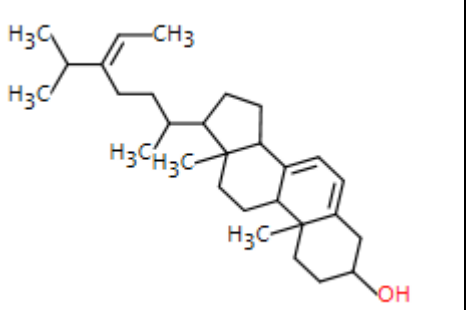
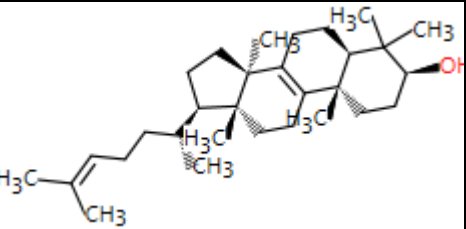
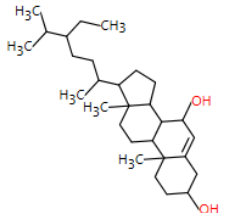
31.7	64907-22-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7alpha,25-Dihydroxycholesterol	<chem>CC(CCCC(C)(C)O)C1CC2C3C(O)C=C4CC(O)CC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB023874">https://foodb.ca/compounds/FDB023874</a> [102]
31.8	17954-98-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	22R-Hydroxycholesterol	<chem>CC(C)CCC(O)C(C)C1CC2C3CC=C4CC(O)CCC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB023285">https://foodb.ca/compounds/FDB023285</a> [103]
31.9	70741-38-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	8-Dehydrocholesterol	<chem>CC(C)CCCC(C)C1CCC2C3CC=C4CC(O)CCC4(C)C=3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB022805">https://foodb.ca/compounds/FDB022805</a> [104]
31.10		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	20alpha-Hydroxycholesterol	<chem>CC(C)CCCC(C)(O)C1CC2C3CC=C4CC(O)CCC4(C)C3CCC12C</chem>		[105]
31.11	4725-24-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Cholest-5-ene-3beta,7alpha,26-triol	<chem>CC(CO)CCCC(C)C1CCC2C3C(O)C=C4CC(O)CCC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB023875">https://foodb.ca/compounds/FDB023875</a> [106]

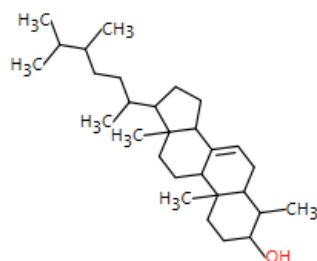
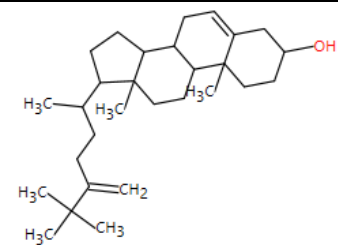
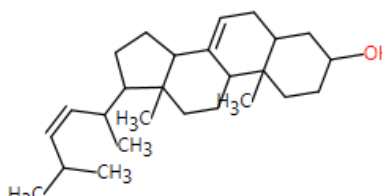
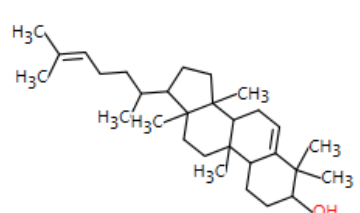
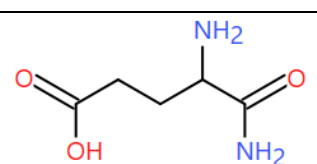
31.12	474-62-4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ergost-5-en-3.beta.-ol, (24R)-	<chem>CC(C)[C@H](C)CC[C@@H](C)[C@H]1CC[C@H]2[C@@H]3CC=C4[C@H]1(O)CC[C@]4(C)[C@H]3CC[C@]12C</chem>		[107]
31.13	481-18-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\alpha$ -Spinasterol	<chem>CCC(C=CC(C)C1CCC2C3=CCC4CC(O)CCC4(C)C3CCC12C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB003992">https://foodb.ca/compounds/FDB003992</a> [108]
31.14	1715-86-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7-Dehydroadosterol	<chem>CC(CCC=C(C)C)C1CCC2C3=CC=C4CC(O)CCC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB030623">https://foodb.ca/compounds/FDB030623</a> [109]
31.15	23582-83-4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-Dehydroepisterol	<chem>CC(C)C(=C)CCC(C)C1CC2C3=CC=C4CC(O)CC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB024117">https://foodb.ca/compounds/FDB024117</a> [110]
31.16	23290-26-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	delta7-Avenasterol	<chem>CC=C(CCC(C)C1CCC2C3=CCC4CC(O)CCC4(C)C3CCC12C)C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB030685">https://foodb.ca/compounds/FDB030685</a> [111]
31.17	481-25-4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Lophenol	<chem>CC(C)CCCC(C)C1CCC2C3=CCC4(C)C(O)CCC4(C)C3CCC12C</chem>		<a href="https://foodb.ca/compounds/FDB012028">https://foodb.ca/compounds/FDB012028</a> [112]

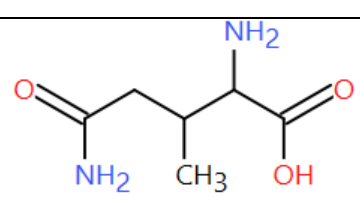
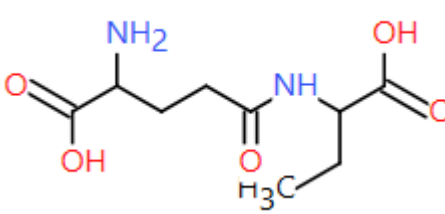
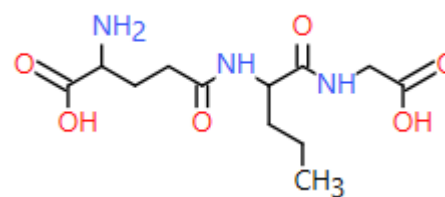
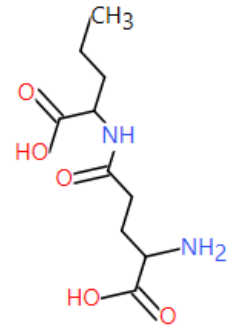
31.18	434-16-2	207100 5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7- Dehydrocholesterol; Provitamin D3;	<chem>CC(C)CCCC(C)C1CCC2C1(CCC3C2=CC=C4C3(C)CC(C4)O)C</chem>		<a href="https://foodb.ca/compounds/FDB021882">https://foodb.ca/compounds/FDB021882</a> [167]
31.19	128-33-6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Zymosterol; 5 $\alpha$ - Cholesta-8,24- dien-3 $\beta$ -ol	<chem>OC1CCC2(C3=C(CCC2C1)C4CCC(C(C)CCC=C(C)C)C4(C)CC3)C</chem>		<a href="https://foodb.ca/compounds/FDB031258">https://foodb.ca/compounds/FDB031258</a> [168]
31.20	7448-03- 5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4 $\alpha$ - Methylzymosterol	<chem>OC1CCC2(C3=C(CCC2C1C)C4CCC(C(C)CCC=C(C)C)C4(C)CC3)C</chem>		<a href="https://foodb.ca/compounds/FDB022496">https://foodb.ca/compounds/FDB022496</a> [170]
31.21	2364-23- 0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5,25- Stigmastadienol	<chem>CCC(CCC(C)C1CCC2C1(CCC3C2CC=C4C3(CCC(C4)O)C)C(=C)C</chem>		[171]

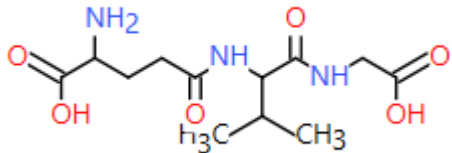
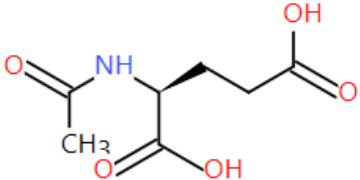
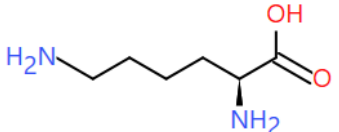
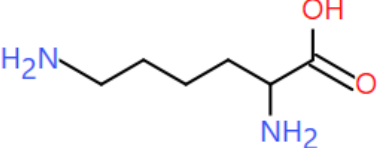
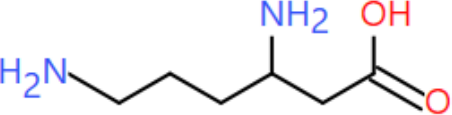
31.22	6785-58-6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5 $\alpha$ -Stigmasta-7,25-dien-3 $\beta$ -ol	<chem>CCC(CCC(C)C1CCC2C1(CCC3C2=CCC4C3(CCC(C4)O)C)C)C(=C)C</chem>		<a href="https://foodb.ca/compounds/FDB001306">https://foodb.ca/compounds/FDB001306</a> [173]
31.23	6384-28-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4,4-Dimethyl-5 $\alpha$ -cholest-7-en-3 $\beta$ -ol	<chem>OC1CCC2(C3CCC4(C(C3=CCC2C1(C)C)CCC4C(C)CCCC(C)C)C)C</chem>		<a href="https://foodb.ca/compounds/FDB030474">https://foodb.ca/compounds/FDB030474</a> [174]
31.24	17605-67-3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Fucosterol; <i>trans</i> -D5-Avenosterol; ( <i>E</i> )-24-Ethylidenecholesterol	<chem>C\C=C(/CCC(C)C1CCC2C3CC=C4CC(O)CCC4(C)C3CCC12C)C(C)C</chem>		[175]

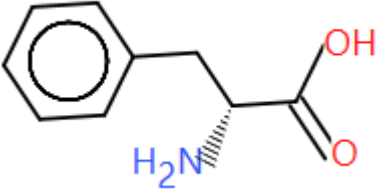
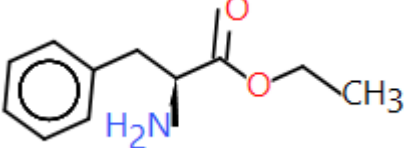
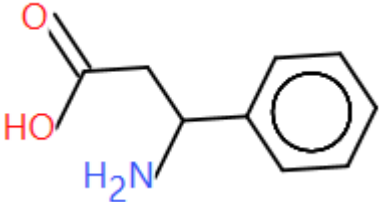
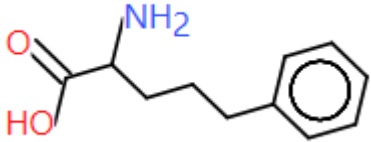
31.25	57-87-4	200352 7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ergosterol; (22 <i>E</i> )- Ergosta-5,7,22- trien-3-ol	<chem>CC(C)C(C)/C=C/C(C)C1CC2C1(CCC3C2=CC=C4C3(CCC(C4)O)C)C</chem>		[176]
31.26	15234- 55-6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	20 <i>α</i> ,22 <i>β</i> - Dihydroxycholest erol	<chem>CC(C)CCC(C(C)(C1CCC2C1(CCC3C2CC=C4C3(CCC(C4)O)C)O)O</chem>		[177]
31.27			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(24 <i>R</i> )-Cholest-5- ene-3- <i>β</i> ,7- <i>α</i> ,24- triol; 5 <i>α</i> -Cholesta-7,24- dien-3- <i>β</i> -ol	<chem>CC(CCC(C(C)O)C)C1CC2C1(CCC3C2C(C=C4C3(CCC(C4)O)C)O)C</chem>		[178]
31.28			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(3 <i>S</i> ,10 <i>R</i> ,13 <i>R</i> )-17- [(2 <i>R</i> ,5 <i>R</i> )-5,6- Dimethylheptan- 2-yl]-10,13- dimethyl- 2,3,4,7,8,9,11,12, 14,15,16,17- dodecahydro-1 <i>H</i> - cyclopenta[ <i>a</i> ]phen anthren-3-ol	<chem>CC(CCC(C)C(C)C)C1CC2C1(CCC3C2CC=C4C3(CCC(C4)O)C)C</chem>		<a href="https://foodb.ca/compounds/FDB012521">https://foodb.ca/compounds/FDB012521</a> [179]

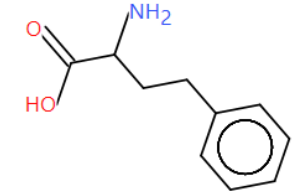
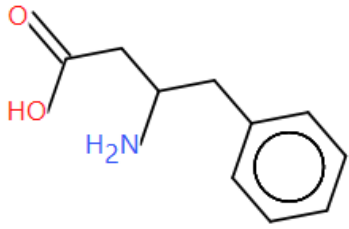
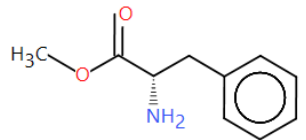
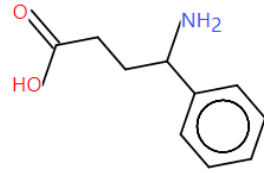
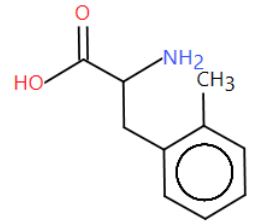
31.29	474-68-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	9ξ -Episterol; 5α,9ξ -Ergosta-7,24(28)-dien-3β-ol	<chem>CC(CCC(=C)C(C)C)C1C CC2C1(CCC3C2=CCC4C 3(CCC(C4)O)C)C</chem>		[180]
31.30		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(3 <i>S</i> ,10 <i>R</i> ,13 <i>R</i> )-10,13-Dimethyl-17-[( <i>Z</i> ,2 <i>R</i> )-5-propan-2-ylhept-5-en-2-yl]-2,3,4,9,11,12,14,15,16,17-decahydro-1 <i>H</i> -cyclopenta[ <i>a</i> ]phenanthren-3-ol	<chem>C/C=C(/CCC(C)C1CCC2 C1(CCC3C2=CC=C4C3(C CC(C4)O)C)C)\C(C)C</chem>		<a href="https://foodb.ca/compounds/FDB024118">https://foodb.ca/compounds/FDB024118</a> [181]
31.31	514-46-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(+)-Tirucallol; (2 <i>S</i> )-(+)-Triucalla-8,24-diene-3β-ol	<chem>CC(CCC=C(C)O)C1CCC2 (C1(CCC3=C2CCC4C3(C CC(C4(C)C)O)C)C)C</chem>		<a href="https://foodb.ca/compounds/FDB016013">https://foodb.ca/compounds/FDB016013</a> [184]
31.32	34427-61-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	7α-Hydroxysitosterol	<chem>CCC(CCC(C)C1CCC2C1( CCC3C2C(C=C4C3(CCC( C4)O)C)O)C)C(C)C</chem>		[185]

31.33	33903-17-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	24 $\alpha$ -Methylphenol	<chem>CC1C(CCC2(C1CC=C3C2CCC4(C3CCC4C(C)CC(C)C(C)C)C)C)O</chem>		[186]
31.34	89702-24-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	25-Methyl-24-methylenecholesterol	<chem>CC(CCC(=C)C(C)(C)C)C1CCC2C1(CCC3C2CC=C4C3(CCC(C4)O)C)C</chem>		[187]
31.35	30674-32-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Asterosterol	<chem>CC(C)/C=C/C(C)C1CCC2C1(CCC3C2=CCC4C3(CC(C4)O)C)C</chem>		[188]
31.36	128779-09-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3 $\beta$ -Cucurbita-5,24-dien-3-ol; Euferol	<chem>CC(CCC=C(C)C)C1CCC2(C1(CCC3(C2CC=C4C3C(C)C(C4)C)O)C)C</chem>		<a href="https://foodb.ca/compounds/FDB018100">https://foodb.ca/compounds/FDB018100</a> [189]
32	328-48-3	FEMA number: FEMA GRAS number: JECFA number: FL No:	Isoglutamine; 4,5-Diamino-5-oxopentanoic acid;	<chem>C(CC(=O)O)C(C(=O)N)N</chem>		UNDER DEVELOPMENT

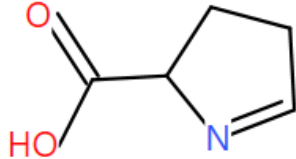
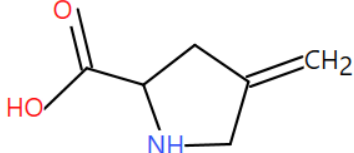
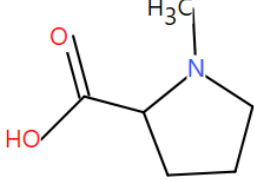
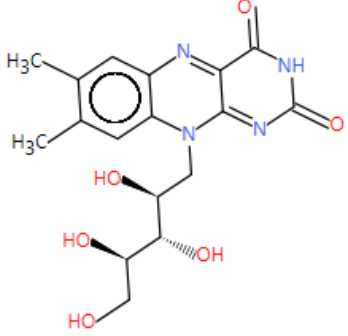
			CoE No:	<i>DL</i> - Isoglutamine			
32.1			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	L-β- Methylglutamin e; (3 <i>S</i> )-3- Methyl- <i>L</i> - glutamine; β- Methylglutamin e	<chem>CC(CC(=O)N)C(C(=O)O)N</chem>		UNDER DEVELOPMENT
32.2	16869- 42-4		FEMA number: 4738 FEMA GRAS number: JECFA number: 2266 FL No: CoE No:	Glutamyl-2- aminobutyric acid; γ- Glutamyl-α- aminobutyrate;  γ- <i>L</i> -Glutamyl- <i>L</i> - 2-aminobutyrate	<chem>CCC(C(=O)O)NC(=O)CCC(C(=O)O)N</chem>		<a href="https://apps.who.int/food-additives-contaminants-jecfa-database/Home/C_hemical/6515">https://apps.who.int/food-additives-contaminants-jecfa-database/Home/C_hemical/6515</a> [208, 209]
32.3	38837- 71-7		FEMA number: 4739 FEMA GRAS number: JECFA number: 2267 FL No: CoE No:	Glutamyl- norvalyl-glycine	<chem>CCCC(C(=O)NCC(=O)O)NC(=O)CCC(C(=O)O)N</chem>		<a href="https://apps.who.int/food-additives-contaminants-jecfa-database/Home/C_hemical/6517">https://apps.who.int/food-additives-contaminants-jecfa-database/Home/C_hemical/6517</a> [208, 210]
32.4	71133- 09-0		FEMA number: 4740 FEMA GRAS number: JECFA number: 2268 FL No: CoE No:	Glutamyl- norvaline	<chem>CCCC(C(=O)O)NC(=O)CCC(C(=O)O)N</chem>		<a href="https://apps.who.int/food-additives-contaminants-jecfa-database/Home/C_hemical/6516">https://apps.who.int/food-additives-contaminants-jecfa-database/Home/C_hemical/6516</a> [208, 211]

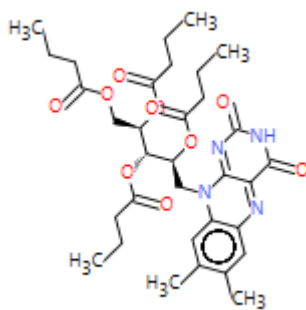
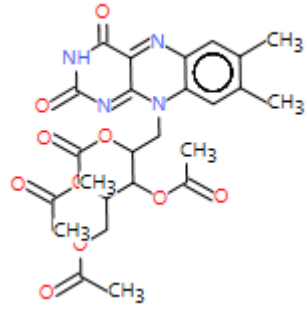
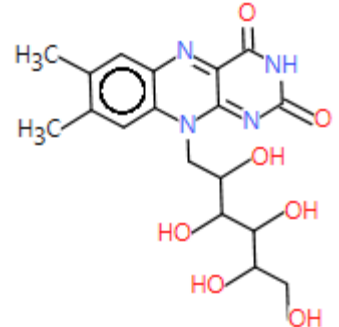
32.5	38837-70-6		FEMA number: 4709 FEMA GRAS number: 25, 27 JECFA number: 2123 FL No: CoE No:	Glutamyl-valyl-glycine	<chem>CC(C)C(C(=O)NCC(=O)O)NC(=O)CCC(C(=O)O)N</chem>		<a href="https://www.hfpa.ppexternal.fda.gov/scripts/fdccc/index.cfm?set=FoodSubstances&amp;id=GLUTAMYLVALYLGLYCINE">https://www.hfpa.ppexternal.fda.gov/scripts/fdccc/index.cfm?set=FoodSubstances&amp;id=GLUTAMYLVALYLGLYCINE</a> [208, 212]
32.6	1188-37-0	2147084	FEMA number: 4752 FEMA GRAS number: 2269 FL No: CoE No:	<i>N</i> -Acetyl- <i>L</i> -glutamic acid	<chem>CC(=O)NC(CCC(=O)O)C(=O)O</chem>		<a href="https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/6513">https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/6513</a> <a href="https://foodb.ca/compounds/FDB031019">https://foodb.ca/compounds/FDB031019</a> [208, 213]
33	923-27-3		<b>FEMA number:</b> <b>FEMA GRAS number:</b> <b>JECFA number:</b> <b>FL No:</b> <b>CoE No:</b>	<b><i>D</i>-Lysine; (2<i>R</i>)-2,6-Diaminohexanoic acid</b>	<chem>NCCCCC(N)C(O)=O</chem>		<a href="https://foodb.ca/compounds/FDB023163">https://foodb.ca/compounds/FDB023163</a> [191]
33.1	70-54-2	200-740-6	FEMA number: FEMA GRAS number: JECFA number: FL No: 17.013 CoE No: 11947	<i>DL</i> -Lysine; (2 <i>RS</i> )-2,6-Diaminohexanoic acid	<chem>NCCCCC(N)C(O)=O</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [192]
33.2	504-21-2		FEMA number: FEMA GRAS number: JECFA number: FL No:	(3 <i>S</i> )-3,6-Diaminohexanoic acid; <i>L</i> -β-lysine	<chem>C(CC(CC(=O)O)N)CN</chem>		<a href="https://foodb.ca/compounds/FDB028778">https://foodb.ca/compounds/FDB028778</a> [193]

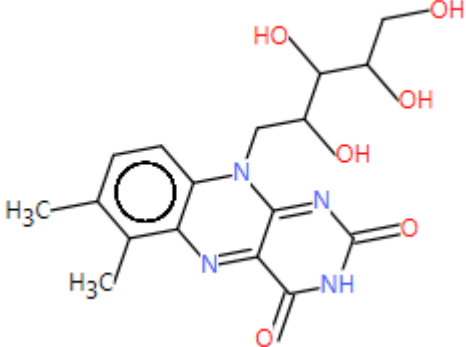
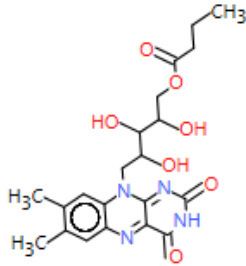
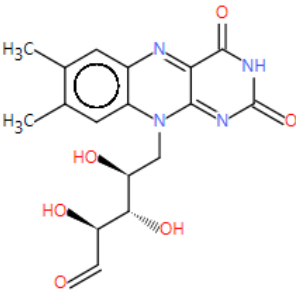
			CoE No:				
34	150-30-1		FEMA number: 3726 FEMA GRAS number: 13 JECFA number: 1432 FL No: 17.017 CoE No: 10488	<i>DL</i> - Phenylalanine; 2-Amino-3- phenylpropanoic acid	<chem>NC(Cc1ccccc1)C(O)=O</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENYLALANINEDL">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENYLALANINEDL</a>  <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a> [194]
34.1	1795-96-6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ethyl 2-amino-3- phenylpropanoate	<chem>CCOC(=O)C(CC1=CC=CC=C1)N</chem>		UNDER DEVELOPMENT
34.2	614-19-7	210371 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Amino-3- phenylpropionic acid; β-Phenyl-β- alanine	<chem>C1=CC=C(C=C1)C(CC(=O)O)N</chem>		UNDER DEVELOPMENT
34.3	34993-02-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5- Phenylnorvaline; 2-Amino-5- phenylpentanoic acid	<chem>C1=CC=C(C=C1)CCCC(=O)O)N</chem>		UNDER DEVELOPMENT

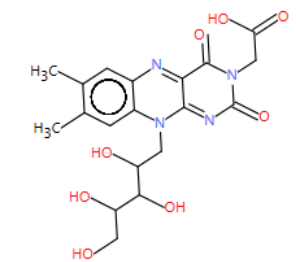
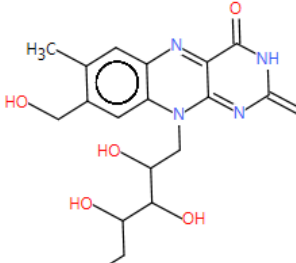
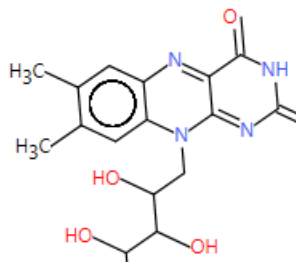
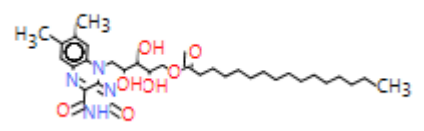
34.4	1012-05-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Amino-4-phenylbutanoic acid; <i>DL</i> -Homophenylalanine	<chem>C1=CC=C(C=C1)CCC(C(=O)O)N</chem>		UNDER DEVELOPMENT
34.5	15099-85-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Amino-4-phenylbutanoic acid; <i>DL</i> -β-Homophenylalanine	<chem>C1=CC=C(C=C1)CC(CC(=O)O)N</chem>		UNDER DEVELOPMENT
34.6	2577-90-4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>L</i> -Phenylalanine, methyl ester; ( <i>S</i> )-Methyl 2-amino-3-phenylpropanoate	<chem>COC(=O)C(CC1=CC=CC=C1)N</chem>		UNDER DEVELOPMENT
34.7	1011-60-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Amino-4-phenylbutanoic acid	<chem>C1=CC=C(C=C1)C(CCC(=O)O)N</chem>		UNDER DEVELOPMENT
34.8	80126-53-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Methyl- <i>L</i> -phenylalanine; ( <i>S</i> )-2-Amino-3-( <i>o</i> -tolyl)propanoic acid	<chem>CC1=CC=CC=C1CC(C(=O)O)N</chem>		UNDER DEVELOPMENT

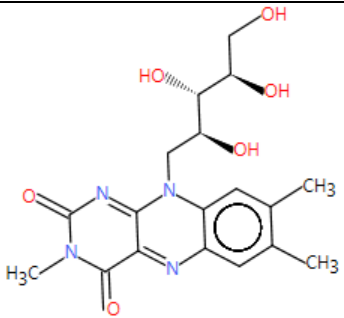
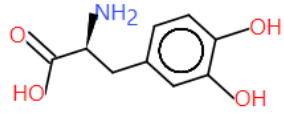
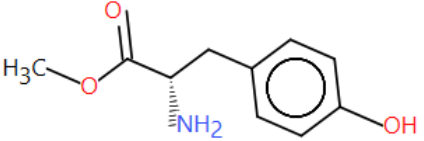
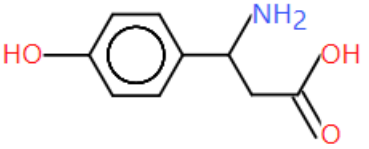
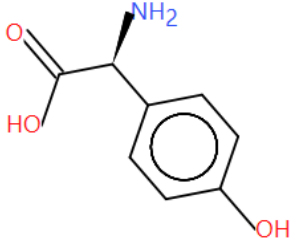
34.9	4599-47-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Amino-3- <i>p</i> -tolyl-propionic acid; 2-Amino-3-(4-methylphenyl)propanoic acid; <i>DL</i> -4-Methylphenylalanine	<chem>CC1=CC=C(C=C1)CC(C(=O)O)N</chem>		UNDER DEVELOPMENT
34.10	2935-35-5	2209098	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>L</i> -Phenylglycine; (2 <i>S</i> )-2-Amino-2-phenylacetic acid	<chem>C1=CC=C(C=C1)C(C(=O)O)N</chem>		UNDER DEVELOPMENT
34.11	6945-32-0	6227220	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Amino-2-phenylpropanoic acid	<chem>CC(C1=CC=CC=C1)(C(=O)O)N</chem>		UNDER DEVELOPMENT
34.12	23239-35-2	6351213	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\alpha$ -Methyl- <i>L</i> -phenylalanine; (2 <i>S</i> )-2-Amino-2-methyl-3-phenylpropanoic acid	<chem>CC(C1=CC=CC=C1)(C(=O)O)N</chem>		UNDER DEVELOPMENT
35	2139-03-9		<b>FEMA number:</b> <b>FEMA GRAS number:</b> <b>JECFA number:</b> <b>FL No:</b> <b>CoE No:</b>	<b>3,4-Dihydro-2<i>H</i>-pyrrole-5-carboxylic acid;</b> <b>1-Pyrroline-2-carboxylic acid;</b> <b>Pyrroline-5-carboxylate;</b> <b>1-Pyrroline-2-carboxylate</b>	<chem>C1CC(=NC1)C(=O)O</chem>		<a href="https://foodb.ca/compounds/FDB024129">https://foodb.ca/compounds/FDB024129</a> [222]

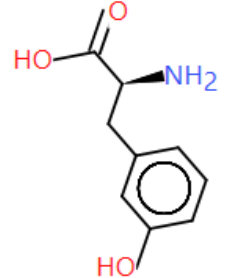
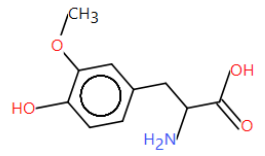
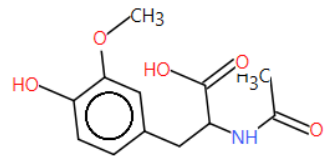
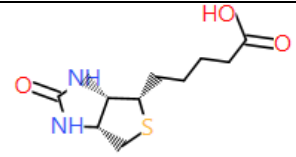
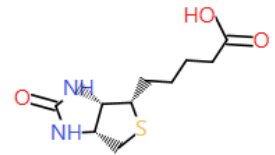
35.1	2906-39-0		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3,4-Dihydro-2 <i>H</i> -pyrrole-2-carboxylic acid; 1-Pyrroline-5-carboxylic acid	<chem>C1CC(N=C1)C(=O)O</chem>		<a href="https://foodb.ca/compounds/FDB022542">https://foodb.ca/compounds/FDB022542</a> [223]
35.2	2370-38-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Methyleneproline; 4-Methylenepyrrolidine-2-carboxylic acid	<chem>C=C1CC(NC1)C(=O)O</chem>		<a href="https://foodb.ca/compounds/FDB000537">https://foodb.ca/compounds/FDB000537</a> [226]
35.3	475-11-6	849164 2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>N</i> -Methyl- <i>L</i> -proline; (2 <i>S</i> )-1-Methylpyrrolidine-2-carboxylic acid	<chem>CN1CCCC1C(=O)O</chem>		[231]
36	83-88-5	201507 1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>Riboflavine; Vitamin B2</b>	<chem>Cc1cc2N=C3C(=O)NC(=O)N=C3N(CC(O)C(O)C(O)CO)c2cc1C</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=RIBOFLAVIN">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=RIBOFLAVIN</a> <a href="https://foodb.ca/compounds/FDB012160">https://foodb.ca/compounds/FDB012160</a> [161]

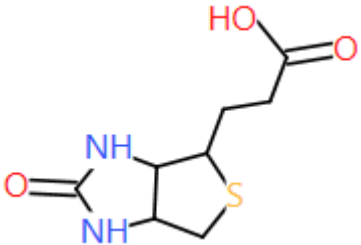
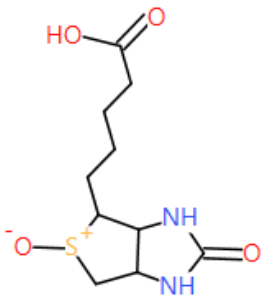
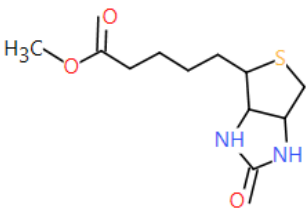
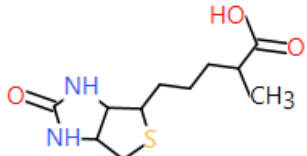
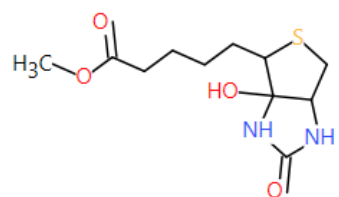
36.1	752-56-7	212034 5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Riboflavin tetrabutryrate; Vitamin B2 tetrabutryrate; Bituvitan; Hibon; Lacflavin;	<chem>CCCC(=O)OCC(C(C(CN1C2=C(C=C(C(=C2)C)C)N=C3C1=NC(=O)NC3=O)OC(=O)CCC)OC(=O)CC)OC(=O)CCC</chem>		UNDER DEVELOPMENT
36.2	752-13-6	212032 4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Riboflavin, 2',3',4',5'- tetraacetate; Riboflavine tetraacetate	<chem>CC1=CC2=C(C=C1C)N(C3=NC(=O)NC(=O)C3=N2)CC(C(C(COC(=O)C)OC(=O)C)OC(=O)C)OC(=O)C</chem>		UNDER DEVELOPMENT
36.3	33210- 88-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Galactoflavine; Sorboflavin	<chem>CC1=CC2=C(C=C1C)N(C3=NC(=O)NC(=O)C3=N2)CC(C(C(C(CO)O)O)O)O</chem>		UNDER DEVELOPMENT

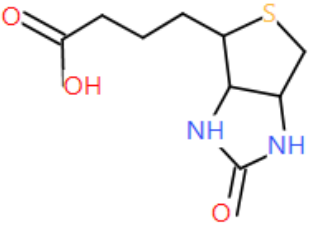
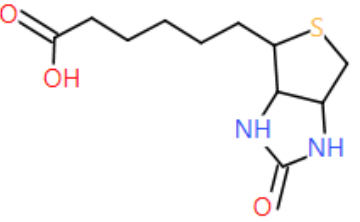
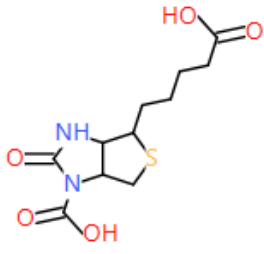
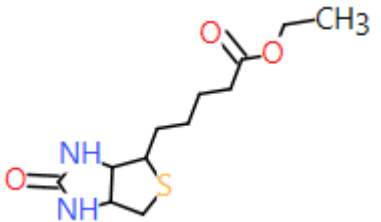
36.4	5984-80-5		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Isoriboflavin; 8-Demethyl-6-methyl-riboflavin	<chem>CC1=C(C2=C(C=C1)N(C3=NC(=O)NC(=O)C3=N2)CC(C(C(CO)O)O)O)C</chem>	 <p>The structure shows the isoriboflavin molecule, which consists of a 6,7-dimethyl-8-ribofuranol ring system. The ribose moiety is attached to the 7-position of the isoalloxazine ring. The ribose chain is shown in red, with hydroxyl groups at the 2, 3, and 4 positions and a primary hydroxyl group at the 5 position. The isoalloxazine ring has methyl groups at the 6 and 7 positions and carbonyl groups at the 2 and 4 positions.</p>	UNDER DEVELOPMENT
36.5	20704-80-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Riboflavin-5'-monobutyrate; Riboflavin, 5'-butanoate	<chem>CCCC(=O)OCC(C(CCN1C2=C(C=C(C(=C2)C)C)N=C3C1=NC(=O)NC3=O)O)O)O</chem>	 <p>The structure shows the riboflavin-5'-monobutyrate molecule. It features the riboflavin core with a butyrate ester group attached to the 5' carbon of the ribose moiety. The ribose chain is shown in red, and the butyrate group is shown in black. The isoalloxazine ring has methyl groups at the 6 and 7 positions and carbonyl groups at the 2 and 4 positions.</p>	UNDER DEVELOPMENT
36.6	59224-04-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Vitamin B2 aldehyde; Riboflavininal	<chem>CC1=CC2=C(C=C1C)N(C3=NC(=O)NC(=O)C3=N2)CC(C(C(C=O)O)O)O</chem>	 <p>The structure shows the riboflavininal molecule, which is the aldehyde form of riboflavin. It features the riboflavin core with an aldehyde group attached to the 5' carbon of the ribose moiety. The ribose chain is shown in red, and the aldehyde group is shown in black. The isoalloxazine ring has methyl groups at the 6 and 7 positions and carbonyl groups at the 2 and 4 positions.</p>	UNDER DEVELOPMENT

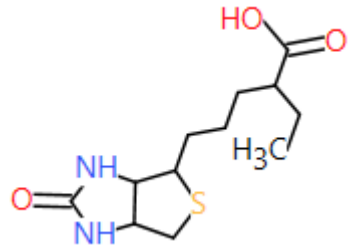
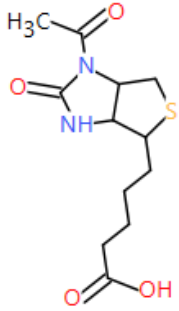
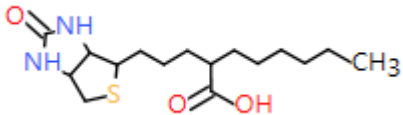
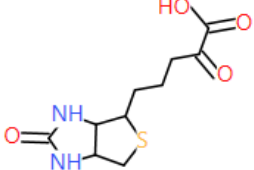
36.7	28714-80-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Carboxymethylriboflavin	<chem>CC1=CC2=C(C=C1C)N(C3=NC(=O)N(C(=O)C3=N2)CC(=O)O)CC(C(C(CO)O)O)O</chem>		UNDER DEVELOPMENT
36.8	52134-62-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	8α-Hydroxymethylriboflavin	<chem>CC1=CC2=C(C=C1CO)N(C3=NC(=O)NC(=O)C3=N2)CC(C(C(CO)O)O)O</chem>		UNDER DEVELOPMENT
36.9	59224-03-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(2 <i>S</i> ,3 <i>S</i> ,4 <i>S</i> )-5-(7,8-Dimethyl-2,4-dioxbenzo[ <i>g</i> ]pteridin-10-yl)-2,3,4-trihydroxypentanoic acid; 7,8-Dimethyl-10-(2,3,4-trihydroxy-4-carboxybutyl)isalloxazine	<chem>CC1=CC2=C(C=C1C)N(C3=NC(=O)NC(=O)C3=N2)CC(C(C(C(=O)O)O)O)O</chem>		UNDER DEVELOPMENT
36.10	73130-89-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Riboflavin-5'-monopalmitate; Riboflavin, 5'-hexadecanoate	<chem>CCCCCCCCCCCCCCCC(=O)OCC(C(C(CN1C2=C(C=C(C(=C2)C)C)N=C3C1=NC(=O)NC3=O)O)O)O</chem>		UNDER DEVELOPMENT

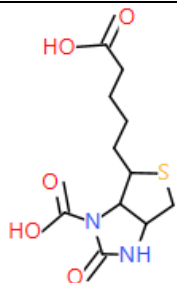
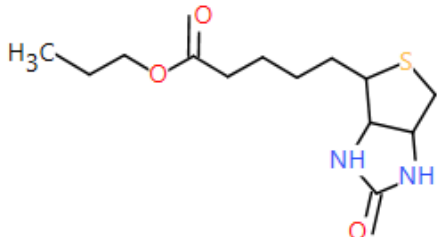
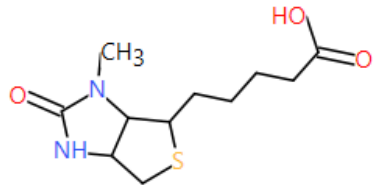
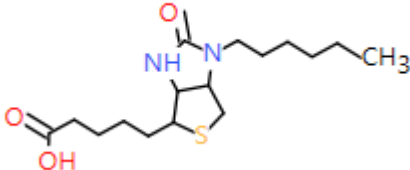
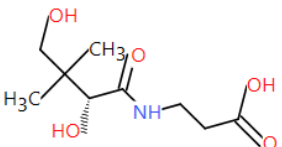
36.11	28721-76-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Methylriboflavin	<chem>CC1=CC2=C(C=C1C)N(C3=NC(=O)N(C(=O)C3=N2)C)CC(C(C(CO)O)O)O</chem>		UNDER DEVELOPMENT
37	59-92-7	2004452	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>L-Dopa zwitterion; (2S)-2-Azaniumyl-3-(3,4-dihydroxyphenyl)-propanoate</b>	<chem>N[C@@H](Cc1ccc(O)c(O)c1)C(O)=O</chem>		[201]
37.1	1080-06-4	2140953	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Methyl L-tyrosinate; L-Tyrosine methyl ester	<chem>COC(=O)C(CC1=CC=C(C=C1)O)N</chem>		UNDER DEVELOPMENT
37.2	6049-54-3	9651913	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\beta$ -Tyrosine; 3-Amino-3-(4-hydroxyphenyl)propanoic acid	<chem>C1=CC(=CC=C1C(CC(=O)O)N)O</chem>		UNDER DEVELOPMENT
37.3	938-97-6	2133532	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2-Amino-2-(4-hydroxyphenyl)acetic acid; 4-Hydroxyphenylglycine	<chem>C1=CC(=CC=C1C(C(=O)O)N)O</chem>		UNDER DEVELOPMENT

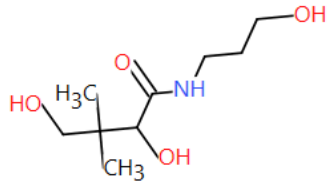
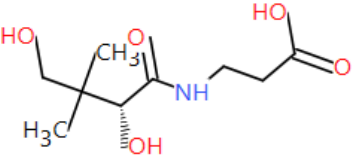
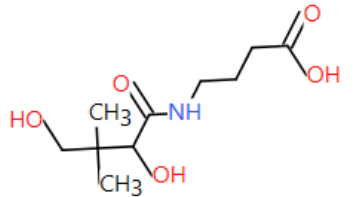
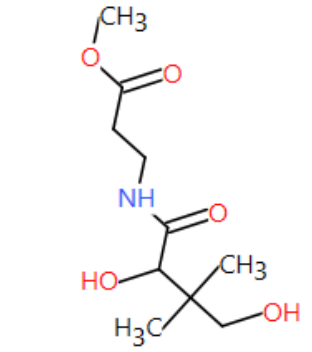
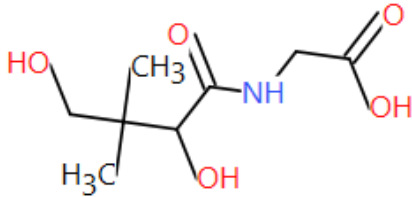
37.4	587-33-7	611743 0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>L-m</i> -Tyrosine; (2 <i>S</i> )-2-Amino-3-(3-hydroxyphenyl)propanoic acid	<chem>C1=CC(=CC(=C1)O)CC(=O)N</chem>		UNDER DEVELOPMENT
37.5	7636-26-2	801788 6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-Methoxytyrosine; 3-Methoxy- <i>DL</i> -tyrosine; 2-Amino-3-(4-hydroxy-3-methoxyphenyl)propanoic acid;	<chem>COC1=C(C=CC(=C1)CC(=O)N)O</chem>		<a href="https://foodb.ca/compounds/FDB022620">https://foodb.ca/compounds/FDB022620</a> [228]
37.6	63357-45-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>N</i> -Acetyl-3-methoxytyrosine; 2-Acetamido-3-(4-hydroxy-3-methoxyphenyl)propanoic acid	<chem>CC(=O)NC(CC1=CC(=C(C=C1)O)OC)C(=O)O</chem>		<a href="https://foodb.ca/compounds/FDB028401">https://foodb.ca/compounds/FDB028401</a> [229]
38	58-85-5	200399 3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b><i>d</i>-Biotin; Vitamin H; Vitamin B7;</b>	<chem>OC(=O)CCCCC1SCC2NC(=O)NC12</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BIOTIN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BIOTIN</a> [163]
38.1	57378-70-8	840986 7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>dl</i> -Biotin;	<chem>C1C2C(C(S1)CCCC(=O)O)NC(=O)N2</chem>		<a href="https://foodb.ca/compounds/FDB014510">https://foodb.ca/compounds/FDB014510</a> [202]

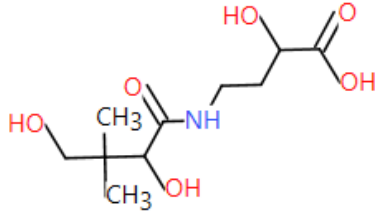
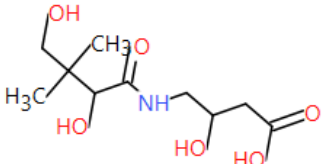
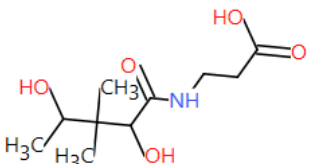
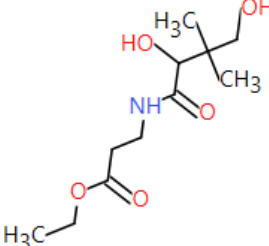
38.2	16968-98-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Bisnorbiotin; <i>d</i> - Allobisnorbiotin	<chem>C1C2C(C(S1)CCC(=O)O)NC(=O)N2</chem>		<a href="https://foodb.ca/compounds/FDB023429">https://foodb.ca/compounds/FDB023429</a> [204]
38.3	2173930-24-8	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Biotin <i>d</i> -sulfoxide	<chem>C1C2C(C(S1=O)CCCCC(=O)O)NC(=O)N2</chem>		UNDER DEVELOPMENT
38.4	608-16-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>d</i> -Biotin methyl ester	<chem>COC(=O)CCCCC1SCC2NC(=O)NC12</chem>		UNDER DEVELOPMENT
38.5	30868-27-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\alpha$ -Methylbiotin	<chem>CC(CCCCC1C2C(CS1)NC(=O)N2)C(=O)O</chem>		UNDER DEVELOPMENT
38.6		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Methyl 5-(3a-hydroxy-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)pentanoate	<chem>COC(=O)CCCCC1C2(C(CS1)NC(=O)N2)O</chem>		UNDER DEVELOPMENT

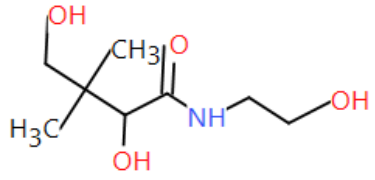
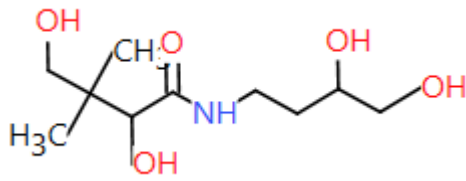
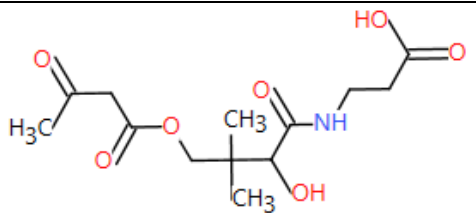
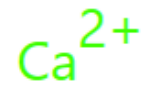
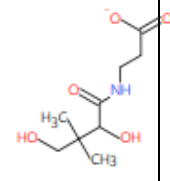
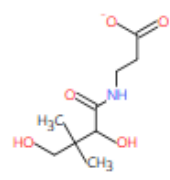
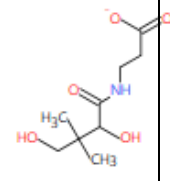
38.7	669-72-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Norbiotin	<chem>C1C2C(C(S1)CCCC(=O)O)NC(=O)N2</chem>		UNDER DEVELOPMENT
38.8	1784-22-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Homobiotin	<chem>C1C2C(C(S1)CCCCC(=O)O)NC(=O)N2</chem>		UNDER DEVELOPMENT
38.9	6706-15-6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	N1'- Carboxybiotin	<chem>C1C2C(C(S1)CCCC(=O)O)NC(=O)N2C(=O)O</chem>		UNDER DEVELOPMENT
38.10		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Biotin ethyl ester; Ethyl biotinate	<chem>CCOC(=O)CCCCC1C2C(CS1)NC(=O)N2</chem>		UNDER DEVELOPMENT

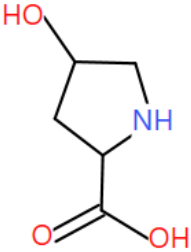
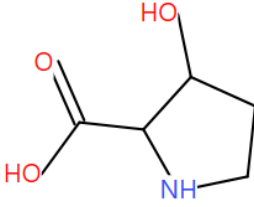
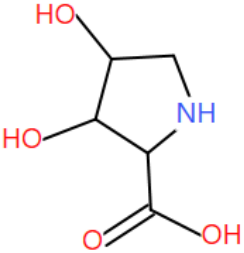
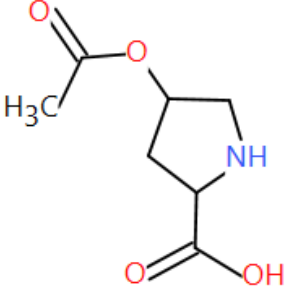
38.11			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ethyl biotin	<chem>CCC(CCCC1C2C(CS1)NC(=O)N2)C(=O)O</chem>		UNDER DEVELOPMENT
38.12			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-[(3aS,4S,6aR)-1-Acetyl-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl]pentanoic acid	<chem>CC(=O)N1C2CSC(C2NC1=O)CCCC(=O)O</chem>		UNDER DEVELOPMENT
38.13			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Hexyl-biotin	<chem>CCCCCCC(CCCC1C2C(CS1)NC(=O)N2)C(=O)O</chem>		UNDER DEVELOPMENT
38.14			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-[(3aS,4S,6aR)-2-Oxo-1,3,3a,4,6,6a-hexahydrothieno[3,4-d]imidazol-4-yl]-2-oxopentanoic acid	<chem>C1C2C(C(S1)CCCC(=O)C(=O)O)NC(=O)N2</chem>		UNDER DEVELOPMENT

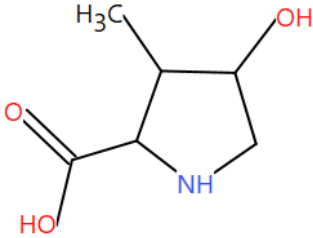
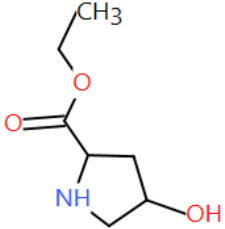
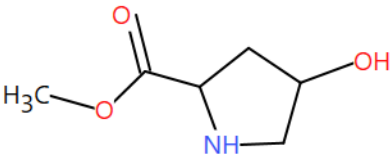
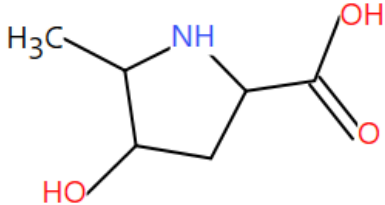
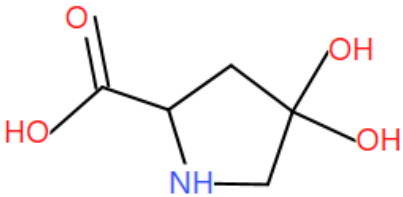
38.15			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(3a <i>S</i> ,4 <i>S</i> ,6a <i>R</i> )-4-(4-carboxybutyl)-2-oxo-3a,4,6,6a-tetrahydro-1 <i>H</i> -thieno[3,4- <i>d</i> ]imidazole-3-carboxylic acid	<chem>C1C2C(C(S1)CCCC(=O)O)N(C(=O)N2)C(=O)O</chem>		UNDER DEVELOPMENT
38.16			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Biotin propyl ester; Propyl biotinate	<chem>CCCOC(=O)CCCCC1C2C(CS1)NC(=O)N2</chem>		UNDER DEVELOPMENT
38.17			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	5-[(3a <i>R</i> ,4 <i>R</i> ,6a <i>S</i> )-3-Methyl-2-oxo-3a,4,6,6a-tetrahydro-1 <i>H</i> -thieno[3,4- <i>d</i> ]imidazol-4-yl]pentanoic acid	<chem>CN1C2C(CSC2CCCC(=O)O)NC1=O</chem>		UNDER DEVELOPMENT
38.18			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>N</i> -Hexylbiotin	<chem>CCCCCCN1C2CSC(C2N1C(=O)CCCC(=O)O)</chem>		UNDER DEVELOPMENT
39	79-83-4		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>D-Pantothenic acid;</b> <b>Vitamin B5;</b>	<chem>CC(C)(CO)C(O)C(=O)NCCC(=O)O</chem>		<a href="https://foodb.ca/compounds/FDB030151">https://foodb.ca/compounds/FDB030151</a> [164]

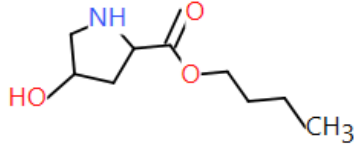
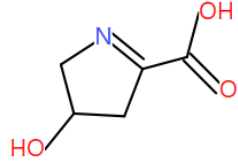
39.1	81-13-0	201327 3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Dexpanthenol; <i>D</i> -Panthenol; Pantothenol; <i>D</i> -Pantothenyl alcohol; Dexpanthenol	<chem>CC(C)(CO)C(C(=O)NCC CO)O</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PANTOTHENYLALCOHOL">https://www.hfpapp external.fda.gov/scr ipts/fdcc/index.cfm ?set=FoodSubstanc es&amp;id=PANTOTH ENYLALCOHOL</a>  [205]
39.2	599-54-2	209965 4	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>DL</i> -Pantothenic acid; 3-(2,4- Dihydroxy-3,3- dimethylbutanami do)propanoic acid	<chem>CC(C)(CO)C(O)C(=O)NC CC(O)=O</chem>		<a href="https://foodb.ca/compounds/FDB008322">https://foodb.ca/com pounds/FDB008322</a>  [206]
39.3	18679- 90-8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>D</i> - Homopantothenic acid; Pantocalcin; Hopantenic acid	<chem>CC(C)(CO)C(C(=O)NCC CC(=O)O)O</chem>		UNDER DEVELOPMENT
39.4	50692- 78-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Methyl <i>D</i> - pantothenate; ( <i>R</i> )-Methyl 3- (2,4-dihydroxy- 3,3- dimethylbutanami do)propanoate	<chem>CC(C)(CO)C(C(=O)NCC C(=O)OC)O</chem>		UNDER DEVELOPMENT
39.5			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Pantoylglycin; <i>N</i> -(2,4- Dihydroxy-3,3- dimethylbutanoyl) glycine	<chem>CC(C)(CO)C(C(=O)NCC(=O)O)O</chem>		UNDER DEVELOPMENT

39.6	1977-34-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\alpha$ -Hydroxyhomopantothenic acid; 4-(2,4-Dihydroxy-3,3-dimethylbutyramido)-2-hydroxybutyric acid	<chem>CC(C)(CO)C(C(=O)NCC(C(=O)O)O)O</chem>		UNDER DEVELOPMENT
39.7	1977-35-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\beta$ -Hydroxyhomopantothenic acid; 4-(2,4-Dihydroxy-3,3-dimethylbutyramido)-3-hydroxybutyric acid	<chem>CC(C)(CO)C(C(=O)NCC(C(=O)O)O)O</chem>		UNDER DEVELOPMENT
39.8	2545-82-6	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	$\omega$ -Methyl pantothenic acid; N-(2,4-Dihydroxy-3,3-dimethyl-1-oxopentyl)- $\beta$ -alanine	<chem>CC(C(C)(C)C(C(=O)NCC(C(=O)O)O)O)O</chem>		UNDER DEVELOPMENT
39.9	10527-68-1	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Ethyl pantothenate	<chem>CCOC(=O)CCNC(=O)C(C(C)CO)O</chem>		UNDER DEVELOPMENT

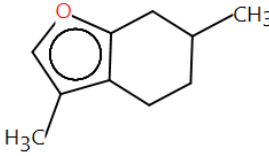
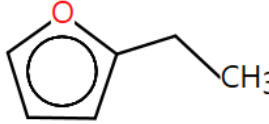
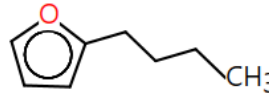
39.10	4417-88-3		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,4-Dihydroxy- <i>N</i> -(2-hydroxyethyl)-3,3-dimethylbutanamide	<chem>CC(C)(CO)C(C(=O)NCCO)O</chem>		UNDER DEVELOPMENT
39.11			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(2 <i>R</i> )- <i>N</i> -(3,4-dihydroxybutyl)-2,4-dihydroxy-3,3-dimethylbutanamide	<chem>CC(C)(CO)C(C(=O)NCCC(O)CO)O</chem>		UNDER DEVELOPMENT
39.12			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	3-[[ <i>(2R)</i> ]-2-Hydroxy-3,3-dimethyl-4-(3-oxobutanoyloxy)butanoyl]amino]propanoic acid	<chem>CC(=O)CC(=O)OCC(C)(C)C(C(=O)NCCC(=O)O)O</chem>		UNDER DEVELOPMENT
39.13	137-08-6	2052789	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Calcium pantothenate; <i>D</i> -Calcium pantothenate; Pantholin; Calpan;	<chem>CC(C)(CO)C(C(=O)NCCC(=O)[O-])O.CC(C)(CO)C(C(=O)NCCC(=O)[O-])O.[Ca+2]</chem>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>	<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CALCIUMPANTOTHENATE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CALCIUMPANTOTHENATE</a> [218]

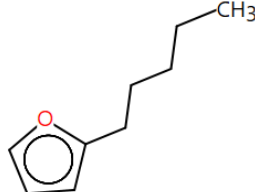
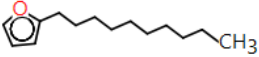
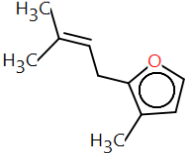
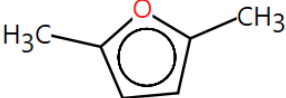
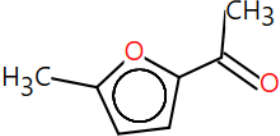
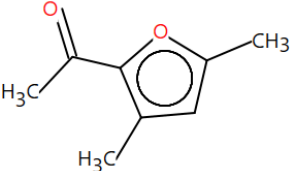
40	51-35-4	2000919	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<b>L-Hydroxyproline;</b> <b>(2S,4R)-4-hydroxypyrrolidine-2-carboxylic acid;</b> <b>trans-4-Hydroxy-L-proline</b>	<chem>OC1CNC(C1)C(=O)=O</chem>		<a href="https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYPROLINE">https://www.hfpapp.external.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYPROLINE</a> [165, 231]
40.1	4298-08-2	6394702	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	<i>trans</i> -3-Hydroxy-L-proline; (2S,3S)-3-Hydroxypyrrolidine-2-carboxylic acid; (3S)-3-Hydroxy-L-proline	<chem>C1CNC(C1O)C(=O)O</chem>		UNDER DEVELOPMENT
40.2	23161-63-9		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(2S,3S,4S)-3,4-Dihydroxypyrrolidine-2-carboxylic acid; (3S,4S)-3,4-Dihydroxy-L-proline	<chem>C1C(C(C(N1)C(=O)O)O)O</chem>		UNDER DEVELOPMENT
40.3	25323-55-1		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Acetoxypyrrolidine-2-carboxylic acid; 4-(Acetyloxy)proline	<chem>CC(=O)OC1CC(NC1)C(=O)O</chem>		UNDER DEVELOPMENT

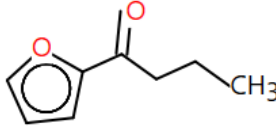
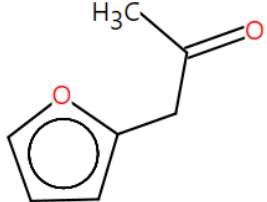
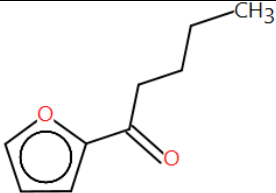
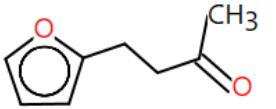
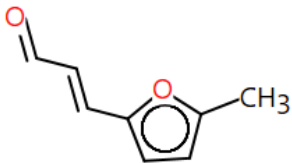
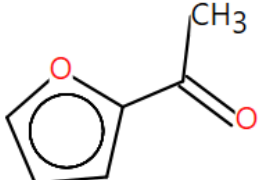
40.4	333354-55-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(3 <i>R</i> ,4 <i>R</i> )-4-Hydroxy-3-methyl- <i>L</i> -proline; (2 <i>S</i> ,3 <i>R</i> ,4 <i>R</i> )-4-Hydroxy-3-methylpyrrolidine-2-carboxylic acid	CC1C(CNC1C(=O)O)O		UNDER DEVELOPMENT
40.5	61478-25-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	(2 <i>S</i> ,4 <i>R</i> )-Ethyl 4-hydroxypyrrolidine-2-carboxylate; 4-Hydroxy- <i>L</i> -proline ethyl ester	CCOC(=O)C1CC(CN1)O		UNDER DEVELOPMENT
40.6	1499-56-5	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Methyl (2 <i>S</i> ,4 <i>R</i> )-4-hydroxypyrrolidine-2-carboxylate; <i>trans</i> -4-Hydroxy- <i>L</i> -proline methyl ester	COC(=O)C1CC(CN1)O		UNDER DEVELOPMENT
40.7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Hydroxy-5-methyl-prolin; (2 <i>S</i> )-4-Hydroxy-5-methylpyrrolidine-2-carboxylic acid	CC1C(CC(N1)C(=O)O)O		UNDER DEVELOPMENT
40.8		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	4-Dihydroxy- <i>l</i> -proline; (2 <i>S</i> )-4,4-Dihydroxypyrrolidine-2-carboxylic acid	C1C(NCC1(O)O)C(=O)O		UNDER DEVELOPMENT

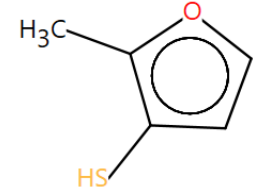
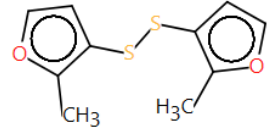
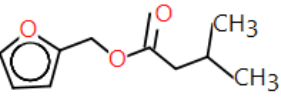
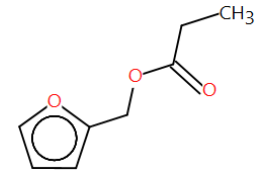
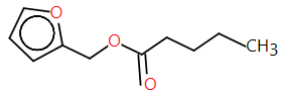
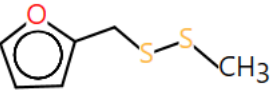
40.9			FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Hydroxyproline butylester; Butyl (2 <i>S</i> ,4 <i>R</i> )-4-hydroxypyrrolidine-2-carboxylate	CCCCOC(=O)C1CC(NC1)O		UNDER DEVELOPMENT
40.10	9054-77-7		FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Pyrroline-4-hydroxy-2-carboxylate; 3-Hydroxy-3,4-dihydro-2 <i>H</i> -pyrrole-5-carboxylic acid	C1C(CN=C1C(=O)O)O		<a href="https://foodb.ca/compounds/FDB022921">https://foodb.ca/compounds/FDB022921</a> [224]

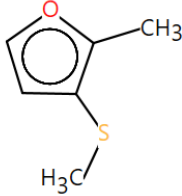
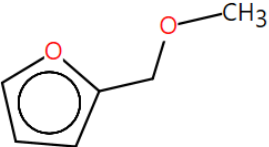
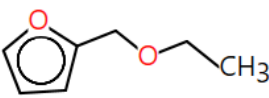
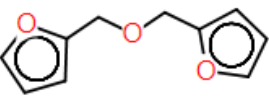
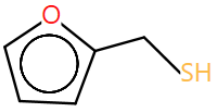
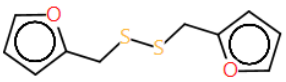
**Table. 3 New 241 chemicals used as Food components**

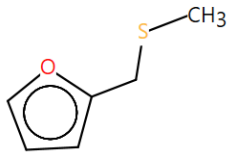
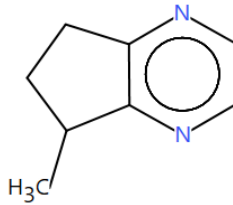
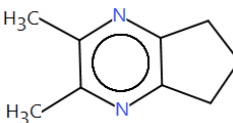
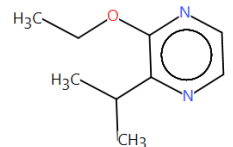
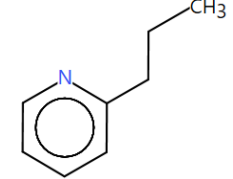
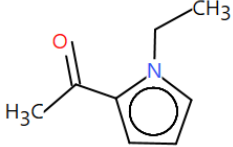
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1	494-90-6	207-795-5	FEMA number: 3235 FEMA GRAS number: 4, 25 JECFA number: 758 FL No: CoE No:	Menthofuran	CC1CCc2c(C)coc2C1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TETRAHYDRODIMETHYLBENZOFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TETRAHYDRODIMETHYLBENZOFURAN</a>
2	3208-16-0	221-714-0	FEMA number: 3673 FEMA GRAS number: 13 JECFA number: 1489 FL No: 13.092 CoE No: 11706	2-Ethylfuran	CCc1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLFURAN</a>
3	4466-24-4	224-732-7	FEMA number: 4081 FEMA GRAS number: 22 JECFA number: 1490 FL No: 13.103	2-butylfuran	CCCCc1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTYLFURAN</a>

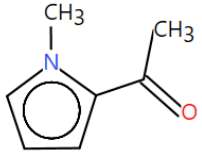
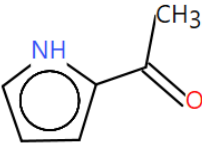
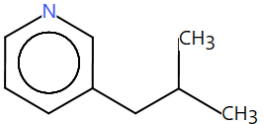
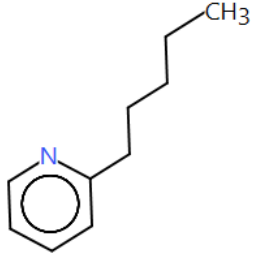
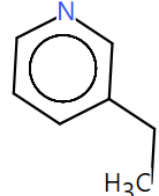
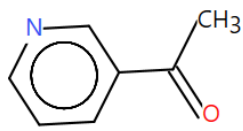
			CoE No: 10927				
4	3777-69-3	223-234-7	FEMA number: 3317 FEMA GRAS number: 5, 25 JECFA number: 1491 FL No: 13.059 CoE No: 10966	2-Pentylfuran	CCCCC1CCCO1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTYLFURAN</a>
5	83469-85-6		FEMA number: 4090 FEMA GRAS number: 22 JECFA number: 1493 FL No: 13.106 CoE No:	2-Decylfuran	CCCCCCCCC1CCCO1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DECYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DECYLFURAN</a>
6	15186-51-3		FEMA number: 4174 FEMA GRAS number: 22 JECFA number: 1494 FL No: 13.148 CoE No:	3-Methyl-2-(3-methylbut-2-enyl)furan	CC(C)=CCc1ccc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLMETHYLBUTENYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLMETHYLBUTENYLFURAN</a>
7	625-86-5	2109143	FEMA number: 4106 FEMA GRAS number: 22 JECFA number: 1488 FL No: 13.029 CoE No: 2208	2,5-Dimethylfuran	Cc1ccc(C)o1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLFURAN</a>
8	1193-79-9	2147791	FEMA number: 3609 FEMA GRAS number: 12, 25 JECFA number: 1504 FL No: 13.083 CoE No: 11038	2-Acetyl-5-methylfuran	CC(=O)c1ccc(C)o1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLMETHYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLMETHYLFURAN</a>
9	22940-86-9	607-185-2	FEMA number: 4071 FEMA GRAS number: 22 JECFA number: 1505 FL No: 13.083 CoE No:	2-Acetyl-3,5-dimethylfuran	CC(=O)c1oc(C)cc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLDIMETHYLFURAN235">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLDIMETHYLFURAN235</a>

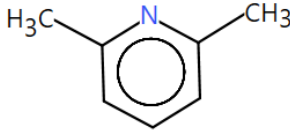
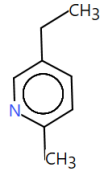
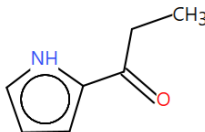
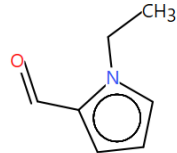
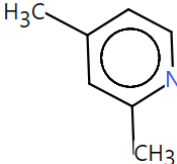
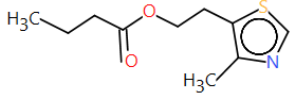
10	4208-57-5	609-987-8	FEMA number: 4083 FEMA GRAS number:22 JECFA number: 1507 FL No: 13.105 CoE No:	2-Butyrylfuran	CCCC(=O)c1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTYRYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTYRYLFURAN</a>
11	6975-60-6	230-234-0	FEMA number: 2496 FEMA GRAS number: 3 JECFA number: 1508 FL No: 13.045 CoE No: 11837	1-(2-Furyl)propan-2-one	CC(=O)Cc1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURYLPROPANONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURYLPROPANONE</a>
12	3194-17-0		FEMA number: 4192 FEMA GRAS number:22 JECFA number: 1509 FL No: 13.163 CoE No:	2-Pentanoylfuran	CCCCC(=O)c1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTANOYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTANOYLFURAN</a>
13	699-17-2	211-831-5	FEMA number: 4120 FEMA GRAS number:22 JECFA number: 1510 FL No: 13.138 CoE No: 11084	1-(2-Furyl)butan-3-one	CC(=O)CCc1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURYLBUTANONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURYLBUTANONE</a>
14	5555-90-8		FEMA number: 4175 FEMA GRAS number:22 JECFA number: 1499 FL No: 13.150 CoE No:	3-(5-Methyl-2-furyl)prop-2-enal	Cc1ccc(C=CC=O)o1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLFURYLPROPENAL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLFURYLPROPENAL</a>
15	1192-62-7	214-757-1	FEMA number: 3163 FEMA GRAS number: 4,25 JECFA number: 1503 FL No: 13.054 CoE No:	2-Acetylfuran	CC(=O)c1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURYL METHYLKETONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURYL METHYLKETONE</a>

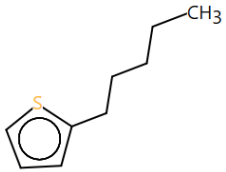
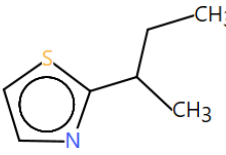
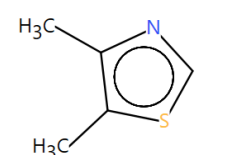
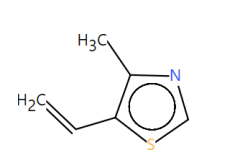
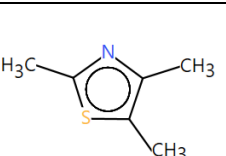
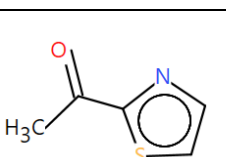
16	28588-74-1	249-094-7	FEMA number: 3188 FEMA GRAS number: 4 JECFA number: 1060 FL No: 13.055 CoE No: 11678	2-Methylfuran-3-thiol	Cc1occc1S		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLFURANTHIOL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLFURANTHIOL</a>
17	28588-75-2	249-095-2	FEMA number: 3259 FEMA GRAS number: 5 JECFA number: 1066 FL No: 13.016 CoE No: 11678	bis-(2-Methyl-3-furyl) disulfide	Cc1occc1SSc1ccoc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=bismethylfuryldisulfide">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=bismethylfuryldisulfide</a>
18	13678-60-9	237-171-8	FEMA number: 3283 FEMA GRAS number: 5 JECFA number: 743 FL No: 13.057 CoE No: 10642	Furfuryl isovalerate	CC(C)CC(=O)OCc1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYL METHYLBUTANOATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYL METHYLBUTANOATE</a>
19	623-19-8	210-776-4	FEMA number: 3346 FEMA GRAS number: 6 JECFA number: 740 FL No: 13.062 CoE No: 10646	Furfuryl propionate	CCC(=O)OCc1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYLPROPIONATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYLPROPIONATE</a>
20	36701-01-6	253-160-0	FEMA number: 3397 FEMA GRAS number: 7, 25 JECFA number: 741 FL No: 13.068 CoE No: 10647	Furfuryl valerate	CCCCC(=O)OCc1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYL PENTANOATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYL PENTANOATE</a>
21	57500-00-2	260-773-7	FEMA number: 3362 FEMA GRAS number: 6 JECFA number: 1078 FL No: 13.064 CoE No: 11513	Methyl furfuryl disulfide	CSSCc1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLFURFURYLDISULFIDE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLFURFURYLDISULFIDE</a>

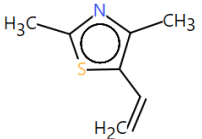
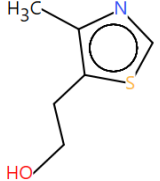
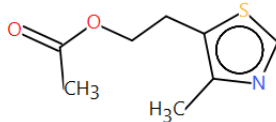
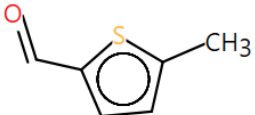
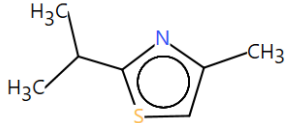
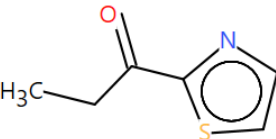
22	63012-97-5	613-135-0	FEMA number: 3949 FEMA GRAS number: 19 JECFA number: 1061 FL No: 13.152 CoE No:	2-Methyl-3-(methylthio)furan	CSc1ccoc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLMETHYLTHIOFURAN23">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLMETHYLTHIOFURAN23</a>
23	13679-46-4 Class II, Class III	237-176-5	FEMA number: 3159 FEMA GRAS number: 4,25 JECFA number: 1520 FL No: 13.052 CoE No: 10944	Furfuryl methyl ether	COCC1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYL METHYL ETHER">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYL METHYL ETHER</a>
24	6270-56-0 Class II, Class III	228-454-7	FEMA number: 4114 FEMA GRAS number: 22 JECFA number: 1521 FL No: 13.123 CoE No: 10940	Ethyl furfuryl ether	CCOCC1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLFURFURYL ETHER">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLFURFURYL ETHER</a>
25	4437-22-3 Class II, Class III	630-432-0	FEMA number: 3337 FEMA GRAS number: 6 JECFA number: 1522 FL No: 13.061 CoE No: 10930	Difurfuryl ether	C(OCC1ccco1)c1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIFURFURYLETH ER">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIFURFURYLETH ER</a>
26	98-02-2	202-628-2	FEMA number: 2493 FEMA GRAS number: 3, 25 JECFA number: 1072 FL No: 07.142 CoE No: 11035	2-Furanmethanethiol	SCc1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYL MERCAPTAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=FURFURYL MERCAPTAN</a>
27	4437-20-1	224-649-6	FEMA number: 3146 FEMA GRAS number: 4 JECFA number: 1081 FL No: 13.050 CoE No: 11480	Difurfuryl disulfide	C(SSC1ccco1)c1ccco1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DITHIODIMETHYLENEDIFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DITHIODIMETHYLENEDIFURAN</a>

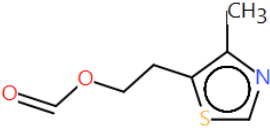
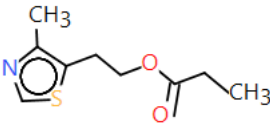
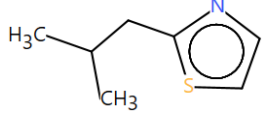
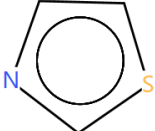
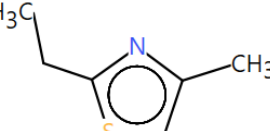
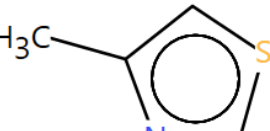
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29	23747-48-0	245-864-1	FEMA number: 3306 FEMA GRAS number: 5, 25 JECFA number: 781 FL No: 14.037 CoE No: 2314	6,7-Dihydro-5-methyl-5H-cyclopentapyrazine	CC1CCc2nccnc12		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLDIHYDROCYCLOPENTAPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLDIHYDROCYCLOPENTAPYRAZINE</a>
30	38917-63-4	639-110-4	FEMA number: 3917 FEMA GRAS number: 19 JECFA number: 7882 FL No: 14.098 CoE No: 11309	6,7-Dihydro-2,3-dimethyl-5H-cyclopentapyrazine	Cc1nc2CCCc2nc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIHYDRODIMETHYLCYCLOPENTAPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIHYDRODIMETHYLCYCLOPENTAPYRAZINE</a>
31	72797-16-1	276-847-7	FEMA number: 4632 FEMA GRAS number: 24 JECFA number: 2129 FL No: CoE No:	2-Ethoxy-3-isopropylpyrazine	CCOc1nccnc1C(C)C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHOXYISOPROPYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHOXYISOPROPYLPYRAZINE</a>
32	622-39-9	210-732-4	FEMA number: 4065 FEMA GRAS number: 21 JECFA number: 1322 FL No: 14.164 CoE No:	2-Propylpyridine	CCCc1ccccn1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPYLPYRIDINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPYLPYRIDINE</a>
33	39741-41-8	639-095-4	FEMA number: 3147 FEMA GRAS number: 4 JECFA number: 1305 FL No: 14.045 CoE No: 11371	2-Acetyl-1-ethylpyrrole	CCn1cccc1C(C)=O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLACETYLPYRROLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLACETYLPYRROLE</a>

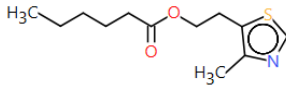
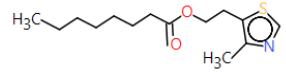
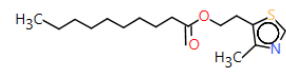
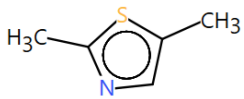
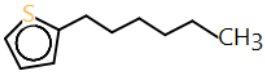
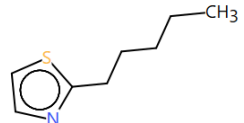
34	932-16-1	213-247-6	FEMA number: 3184 FEMA GRAS number: 4 JECFA number: 1306 FL No: 14.046 CoE No: 11373	2-Acetyl-1-methylpyrrole	<chem>CC(=O)c1cccn1C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLACETYLPYRROLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLACETYLPYRROLE</a>
35	1072-83-9	214-016-2	FEMA number: 3202 FEMA GRAS number: 4, 25 JECFA number: 1307 FL No: 14.047 CoE No: 11721	2-Acetylpyrrole	<chem>CC(=O)c1ccc[nH]1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPYRROLYLKETONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPYRROLYLKETONE</a>
36	14159-61-6	238-003-6	FEMA number: 3371 FEMA GRAS number: 6 JECFA number: 1312 FL No: 14.059 CoE No: 11396	3-Isobutylpyridine	<chem>CC(C)Cc1cccn1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPROPYLPYRIDINE32">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPROPYLPYRIDINE32</a>
37	2294-76-0	218-937-0	FEMA number: 3383 FEMA GRAS number: 6, 7 JECFA number: 1313 FL No: 14.060 CoE No: 11412	2-Pentylpyridine	<chem>CCCCC1CCCCN1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTYLPYRIDINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTYLPYRIDINE</a>
38	536-78-7	208-647-2	FEMA number: 3394 FEMA GRAS number: 7, 25 JECFA number: 1315 FL No: 14.061 CoE No: 11386	3-Ethylpyridine	<chem>CCc1cccn1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLPYRIDINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLPYRIDINE</a>
39	350-03-8	206-496-7	FEMA number: 3424 FEMA GRAS number: 8, 25 JECFA number: 1316 FL No: 09.681 CoE No:	3-Acetylpyridine	<chem>CC(=O)c1cccn1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLPYRIDINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLPYRIDINE</a>

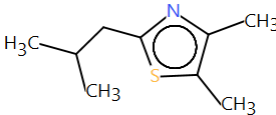
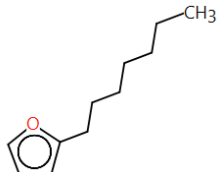
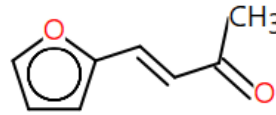
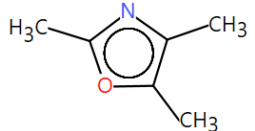
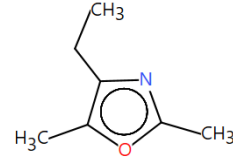
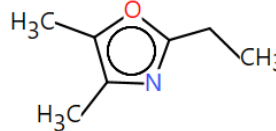
40	108-48-5	203-587-3	FEMA number: 3540 FEMA GRAS number: 11 JECFA number: 1317 FL No: 14.065 CoE No: 11381	2,6-Dimethylpyridine	<chem>Cc1cccc(C)n1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRIDINE26">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRIDINE26</a>
41	104-90-5	203-250-0	FEMA number: 3546 FEMA GRAS number: 11 JECFA number: 1318 FL No: 14.066 CoE No: 11385	5-Ethyl-2-methylpyridine	<chem>CCc1ccc(C)nc1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMETHYLPYRIDINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMETHYLPYRIDINE</a>
42	1073-26-3	214-026-7	FEMA number: 3614 FEMA GRAS number: 12 JECFA number: 1319 FL No: 14.068 CoE No: 11942	2-Propionylpyrrole	<chem>CCC(=O)c1ccc[nH]1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPIONYLPYRROLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPIONYLPYRROLE</a>
43	2167-14-8, 932-16-1	639-017-9	FEMA number: 4317 FEMA GRAS number: 23 JECFA number: 2150 FL No: 14.169 CoE No: 11373	1-Ethyl-2-pyrrolicarboxaldehyde	<chem>CCn1cccc1C=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLPYRROLECARBOXALDEHYDE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLPYRROLECARBOXALDEHYDE</a>
44	108-47-4	203-586-8	FEMA number: 4389 FEMA GRAS number: 23 JECFA number: 2151 FL No: 14.104 CoE No:	2,4-Dimethylpyridine	<chem>Cc1ccnc(C)c1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRIDINE24">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLPYRIDINE24</a>
45	94159-31-6	303-209-8	FEMA number: 4277 FEMA GRAS number: 23 JECFA number: 1753 FL No: CoE No:	2-(4-Methyl-5-thiazolyl)ethyl butanoate	<chem>CCCC(=O)OCCc1scnc1C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLEETHYLBUTANOATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLEETHYLBUTANOATE</a>

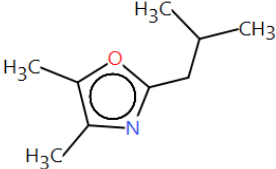
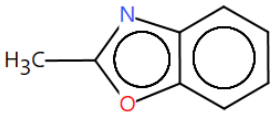
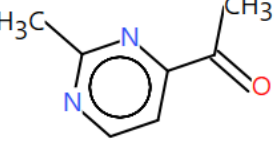
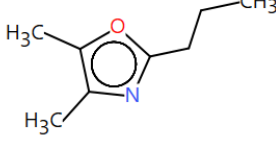
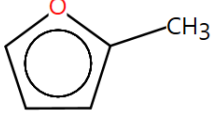
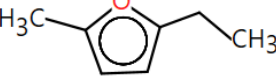
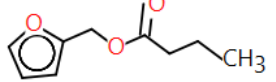
46	4861-58-9	225-465-9	FEMA number: 4387 FEMA GRAS number: 23 JECFA number: 2106 FL No: 15.096 CoE No: 11634	2-Pentylthiophene	CCCCC1CCCS1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTYLTHIOPHENE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTYLTHIOPHENE</a>
47	18277-27-5	242-154-3	FEMA number: 3372 FEMA GRAS number: 6 JECFA number:1033 FL No: 15.022 CoE No: 11598	2-(sec-Butyl)thiazole	CCC(C)C1NCCS1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPROPYLTIAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPROPYLTIAZOLE</a>
48	3581-91-7	222-703-3	FEMA number: 3274 FEMA GRAS number: 5 JECFA number:1035 FL No: 15.017 CoE No: 11606	4,5-Dimethylthiazole	Cc1ncsc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLTHIAZOLE45">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLTHIAZOLE45</a>
49	1759-28-0	217-160-4	FEMA number: 3313 FEMA GRAS number: 5 JECFA number:1038 FL No: 15.018 CoE No: 11633	4-Methyl-5-vinylthiazole	Cc1ncsc1C=C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLVINYLTHIAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLVINYLTHIAZOLE</a>
50	13623-11-5	2371079	FEMA number: 3325 FEMA GRAS number: 5 JECFA number:1036 FL No: 15.019 CoE No: 11650	2,4,5-Trimethylthiazole	Cc1nc(C)c(C)s1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLTHIAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLTHIAZOLE</a>
51	24295-03-2	246-134-5	FEMA number: 3328 FEMA GRAS number: 6, 25 JECFA number:1041 FL No: 15.020 CoE No: 11726	2-Acetylthiazole	CC(=O)C1NCCS1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLTHIAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLTHIAZOLE</a>

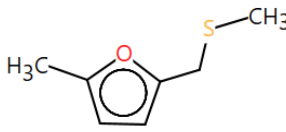
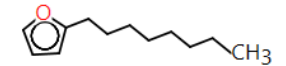
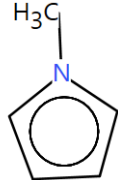
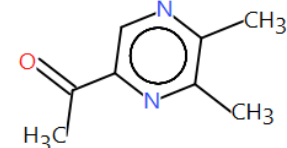
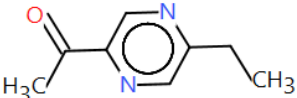
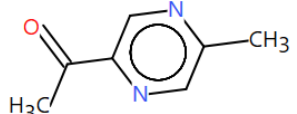
52	65505-18-2		FEMA number: 3145 FEMA GRAS number: 4 JECFA number:1039 FL No: 15.005 CoE No: 2237	2,4-Dimethyl-5-vinylthiazole	<chem>Cc1nc(C)c(C=C)s1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLVINYLTIAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLVINYLTIAZOLE</a>
53	137-00-8	205-272-6	FEMA number: 3204 FEMA GRAS number: 4, 25 JECFA number:1031 FL No: 15.014 CoE No: 11621	5-(2-Hydroxyethyl)-4-methylthiazole	<chem>Cc1ncsc1CCO</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLEETHANOL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLEETHANOL</a>
54	656-53-1	211-515-7	FEMA number: 3205 FEMA GRAS number: 4 JECFA number:1054 FL No: 15.015 CoE No: 11620	4-Methyl-5-(2-acetoxyethyl)thiazole	<chem>CC(=O)OCCc1scnc1C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLEETHANOLACETATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLEETHANOLACETATE</a>
55	13679-70-4	237-178-6	FEMA number: 3209 FEMA GRAS number: 4, 25 JECFA number:1050 FL No: 15.004 CoE No: 2203	5-Methyl-2-thiophenecarbaldehyde	<chem>Cc1ccc(C=O)s1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIOPHENECARBOXALDEHYDE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIOPHENECARBOXALDEHYDE</a>
56	15679-13-7	239-758-4	FEMA number: 3555 FEMA GRAS number: 11 JECFA number:1037 FL No: 15.026 CoE No:	2-Isopropyl-4-methylthiazole	<chem>CC(C)c1nc(C)cs1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOPROPYLMETHYLTHIAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOPROPYLMETHYLTHIAZOLE</a>
57	43039-98-1		FEMA number: 3611 FEMA GRAS number: 12 JECFA number:1042 FL No: 15.027 CoE No:	2-Propionylthiazole	<chem>CCC(=O)c1nccs1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPIONYLTIAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPIONYLTIAZOLE</a>

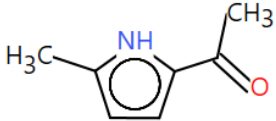
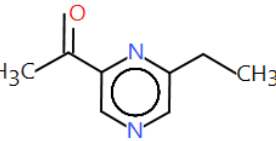
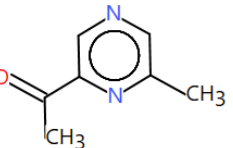
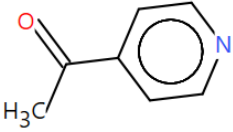
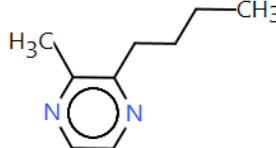
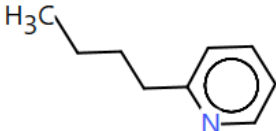
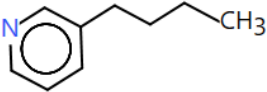
58	90731-56-9	639-211-3	FEMA number: 4275 FEMA GRAS number: 23 JECFA number:1751 FL No: CoE No:	2-(5-Methyl-4-thiazolyl)ethyl formate	Cc1ncsc1CCOC=O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLYLETHYLFORMAT E">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLYLETHYLFORMAT E</a>
59	324742-96-3	639-091-2	FEMA number: 4276 FEMA GRAS number: 23 JECFA number:1752 FL No: CoE No:	2-(4-Methyl-5-thiazolyl)ethyl propionate	CCC(=O)OCCc1scnc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLYLETHYLPROPIO NATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLYLETHYLPROPIO NATE</a>
60	18640-74-9	242-470-1	FEMA number: 3134 FEMA GRAS number: 4 JECFA number:1034 FL No: 15.013 CoE No: 11618	2-Isobutylthiazole	CC(C)Cc1ncs1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOBUTYLTHIAZO LE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOBUTYLTHIAZO LE</a>
61	288-47-1	2060213	FEMA number: 3615 FEMA GRAS number: 12 JECFA number:1032 FL No: 15.028 CoE No:	Thiazole	c1cscn1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=THIAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=THIAZOLE</a>
62	15679-12-6	239-757-9	FEMA number: 3680 FEMA GRAS number: 13, 25 JECFA number:1044 FL No: 15.033 CoE No: 11612	2-Ethyl 4-methylthiazole	CCc1nc(C)cs1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMETHYLTH IAZOLE24">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLMETHYLTH IAZOLE24</a>
63	693-95-8	211-764-1	FEMA number: 3716 FEMA GRAS number: 13 JECFA number:1043 FL No: 15.035 CoE No: 11627	4-Methylthiazole	Cc1cscn1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOL E">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOL E</a>

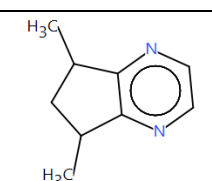
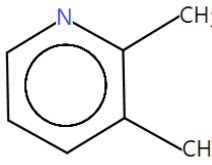
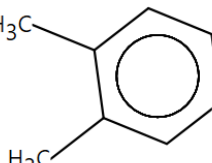
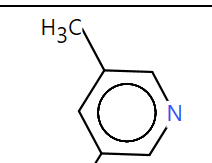
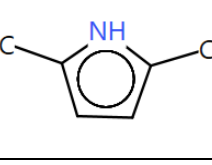
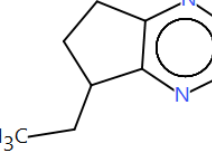
64	94159-32-7	303-210-3	FEMA number: 4279 FEMA GRAS number: 23 JECFA number:1755 FL No: CoE No:	2-(4-Methyl-5-thiazolyl)ethyl hexanoate	CCCCC(=O)OCCc1scnc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLYLETHYLHEXANOATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLYLETHYLHEXANOATE</a>
65	163266-17-9	639-026-8	FEMA number: 4280 FEMA GRAS number: 23 JECFA number:1756 FL No: CoE No:	2-(4-Methyl-5-thiazolyl)ethyl octanoate	CCCCCCC(=O)OCCc1scnc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLYLETHYLOCTANOATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLYLETHYLOCTANOATE</a>
66	101426-31-7	639-004-8	FEMA number: 4281 FEMA GRAS number: 23 JECFA number:1757 FL No: CoE No:	2-(4-Methyl-5-thiazolyl)ethyl decanoate	CCCCCCCCC(=O)OCc1scnc1C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLYLETHYLDECANOATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTHIAZOLYLETHYLDECANOATE</a>
67	4175-66-0	806-489-4	FEMA number: 4035 FEMA GRAS number: 21 JECFA number:1758 FL No: 15.063 CoE No:	2,5-Dimethylthiazole	Cc1cnc(C)s1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLTHIAZOLE25">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLTHIAZOLE25</a>
68	18794-77-9	242-579-4	FEMA number: 4137 FEMA GRAS number: 22 JECFA number:1764 FL No: 15.076 CoE No: 11616	2-Hexylthiophene	CCCCCc1cccs1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEXYLTHIOPHENE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEXYLTHIOPHENE</a>
69	37645-62-8		FEMA number: 4641 FEMA GRAS number: 24 JECFA number:2108 FL No: CoE No:	2-Pentylthiazole	CCCCC1nccs1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTYLTHIAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTYLTHIAZOLE</a>

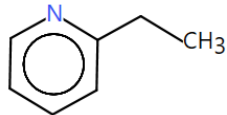
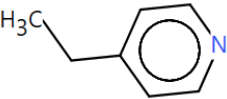
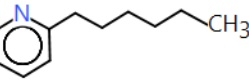
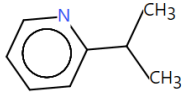
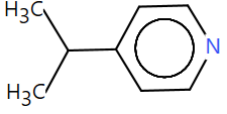
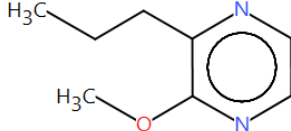
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71	3777-71-7 Class II, Class III	223-236-8	FEMA number: 3401 FEMA GRAS number: 7 JECFA number:1492 FL No: 13.069 CoE No: 10952	2-Heptylfuran	<chem>CCCCCCCc1ccco1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEPTYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEPTYLFURAN</a>
72	623-15-4	2107743	FEMA number: 1511 FEMA GRAS number: JECFA number: 1511 FL No: 13.044 CoE No: 11838	4-(2-Furyl)but-3-en-2-one	<chem>CC(=O)C=Cc1ccco1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
73	20662-84-4	243-952-4	FEMA number:4394 FEMA GRAS number: 23 JECFA number: 1553 FL No: 13.169 CoE No: 11424	Trimethyloxazole	<chem>Cc1nc(C)c(C)o1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLOXAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLOXAZOLE</a>
74	30408-61-8	250-181-7	FEMA number:4395 FEMA GRAS number: 23 JECFA number: 1554 FL No: 13.118 CoE No:	2,5-Dimethyl-4-ethyloxazole	<chem>CCc1nc(C)oc1C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLETHYLOXAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLETHYLOXAZOLE</a>
75	53833-30-0	258-815-4	FEMA number:3672 FEMA GRAS number: 13 JECFA number: 1555 FL No: 13.091 CoE No: -	4,5-Dimethyl-2-ethyloxazole	<chem>CCc1nc(C)c(C)o1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLDIMETHYLOXAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLDIMETHYLOXAZOLE</a>

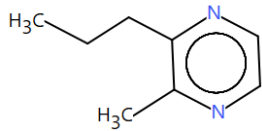
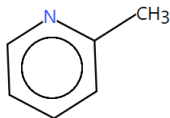
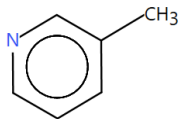
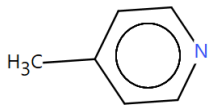
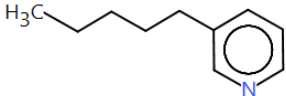
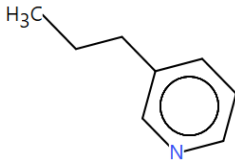
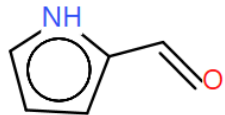
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77	95-21-6	202-399-9	FEMA number: 4398 FEMA GRAS number: 23 JECFA number: 1557 FL No: 13.154 CoE No: -	2-Methyl-4,5-benzo-oxazole	<chem>Cc1nc2ccccc2o1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLBENZOXAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLBENZOXAZOLE</a>
78	67860-38-2	805-272-1	FEMA number: 3654 FEMA GRAS number: 13 JECFA number: 1565 FL No: 14.070 CoE No:	4-Acetyl-2-methylpyrimidine	<chem>CC(=O)c1ccnc(C)n1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLMETHYLPYRIMIDINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLMETHYLPYRIMIDINE</a>
79	53833-32-2	258-817-5	FEMA number: 4396 FEMA GRAS number: 23 JECFA number: 1569 FL No: 13.112 CoE No: 11379	4,5-Dimethyl-2-propyloxazole	<chem>CCCC1nc(C)c(C)o1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPYLDIMETHYLOXAZOLE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPYLDIMETHYLOXAZOLE</a>
80	534-22-5	248-253-8	FEMA number: 4179 FEMA GRAS number: 22 JECFA number: 1487 FL No: 13.030 CoE No: 2209	2-Methylfuran	<chem>Cc1ccco1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLFURAN</a>
81	1703-52-2	216-937-5	FEMA number: FEMA GRAS number: JECFA number: FL No: 13.125 CoE No: 10942	2-Ethyl-5-methylfuran	<chem>CCc1ccc(C)o1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
82	623-21-2	210-779-0	FEMA number: FEMA GRAS number: JECFA number: 759	Furfuryl butyrate	<chem>CCCC(=O)OCc1ccco1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=</a>

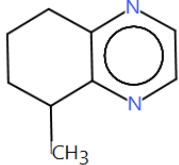
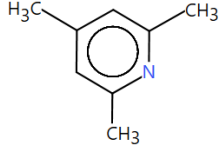
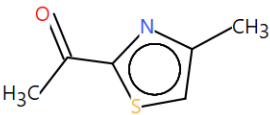
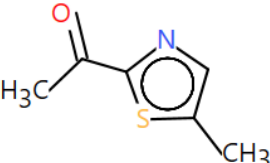
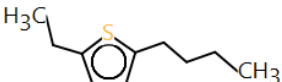
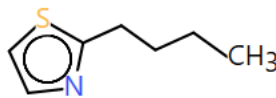
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83	13679-60-2		FEMA number: FEMA GRAS number: JECFA number: FL No: 13.145 CoE No: 11522	Methyl 5-methylfurfuryl sulfide	<chem>CSCc1ccc(C)o1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
84	4179-38-8	224-049-4	FEMA number: FEMA GRAS number: JECFA number: FL No: 13.162 CoE No: 10965	2-Octylfuran	<chem>CCCCCCCCc1ccco1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
85	96-54-8	202-513-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	1-Methylpyrrole	<chem>Cn1cccc1</chem>		<a href="https://foodb.ca/compounds/FDB011113">https://foodb.ca/compounds/FDB011113</a>
86	54300-10-6		FEMA number: FEMA GRAS number: JECFA number: FL No: 14.081 CoE No:	5-Acetyl-2,3-dimethylpyrazine	<chem>CC(=O)c1cnc(C)c(C)n1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
87	43108-58-3		FEMA number: FEMA GRAS number: JECFA number: FL No: 14.083 CoE No:	2-Acetyl-5-ethylpyrazine	<chem>CCc1cnc(Cn1)C(C)=O</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
88	22047-27-4	865-745-3	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.084 CoE No: 11297	2-Acetyl-5-methylpyrazine	<chem>CC(=O)c1cnc(C)n1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

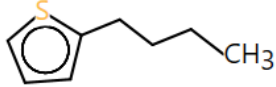
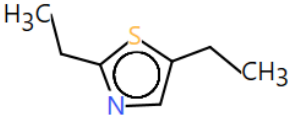
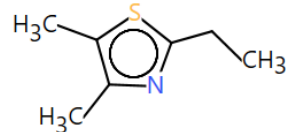
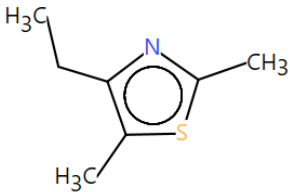
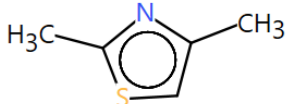
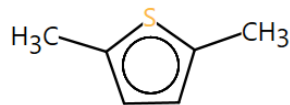
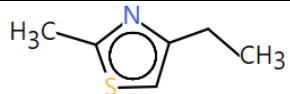
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90	34413-34-8		FEMA number: FEMA GRAS number: JECFA number: FL No: 14.086 CoE No:	2-Acetyl-6-ethylpyrazine	<chem>CCc1cncc(n1)C(C)=O</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
91	22047-26-3	866-192-0	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.087 CoE No: 11298	2-Acetyl-6-methylpyrazine	<chem>CC(=O)c1cncc(C)n1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
92	1122-54-9	214-350-9	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.089 CoE No:	4-Acetylpyridine	<chem>CC(=O)c1ccncc1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
93	15987-00-5	240-126-5	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.091 CoE No:	2-Butyl-3-methylpyrazine	<chem>CCCCc1ncnc1C</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
94	5058-19-5	225-758-1	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.092 CoE No:	2-Butylpyridine	<chem>CCCCc1cccn1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
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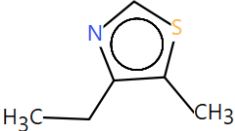
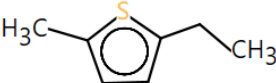
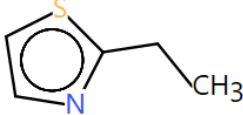
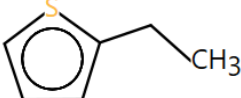
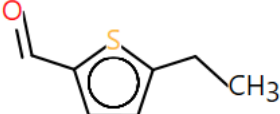
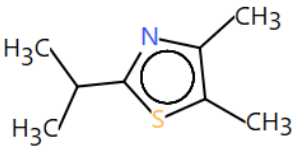
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97	583-61-9	209-514-1	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.103 CoE No:	2,3- Dimethylpyridine	Cc1ccnc1C		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
98	583-58-4	209-511-5	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.105 CoE No:	3,4- Dimethylpyridine	Cc1ccnc1C		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
99	591-22-0	209-708-6	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.106 CoE No: 11382	3,5- Dimethylpyridine	Cc1cnc(C)c1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
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101	52517-53-0		FEMA number: FEMA GRAS number: JECFA number: FL No: 14.113 CoE No:	5-Ethyl-6,7- dihydro-5H- cyclopentapyrazin e	CCC1CCc2ncnc12		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

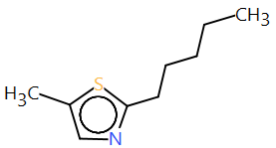
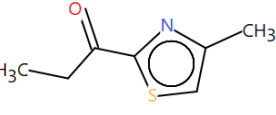
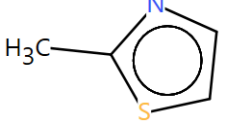
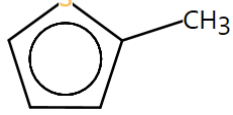
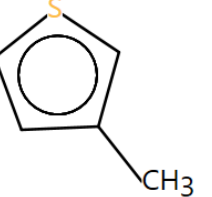
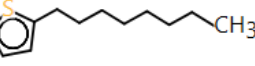
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103	536-75-4	208-646-7	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.116 CoE No: 11387	4-Ethylpyridine	CCc1ccncc1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
104	1129-69-7	214-454-4	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.117 CoE No:	2-Hexylpyridine	CCCCCCc1cccn1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
105	644-98-4	211-426-3	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.124 CoE No: 11400	2-Isopropylpyridine	CC(C)c1cccn1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
106	696-30-0	211-794-5	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.125 CoE No:	4-Isopropylpyridine	CC(C)c1ccncc1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
107	25680-57-3		FEMA number: FEMA GRAS number: JECFA number: FL No: 14.127 CoE No:	2-Methoxy-3-propylpyrazine	CCc1ncnc1OC		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

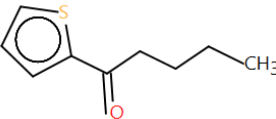
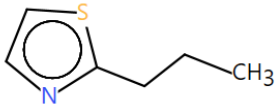
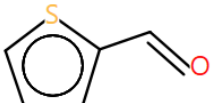
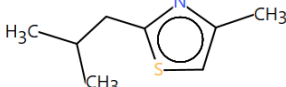
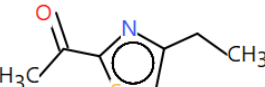
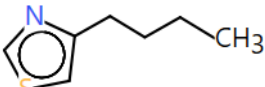
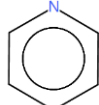
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109	109-06-8	203-643-7	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.134 CoE No: 11415	2-Methylpyridine	Cc1ccccn1		<a href="https://foodb.ca/compounds/FDB004399">https://foodb.ca/compounds/FDB004399</a>
110	108-99-6	203-636-9	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.135 CoE No: 11801	3-Methylpyridine	Cc1cccn1		<a href="https://foodb.ca/compounds/FDB004416">https://foodb.ca/compounds/FDB004416</a>
111	108-89-4	203-626-4	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.136 CoE No: 11416	4-Methylpyridine	Cc1ccncc1		<a href="https://foodb.ca/compounds/FDB004424">https://foodb.ca/compounds/FDB004424</a>
112	1802-20-6		FEMA number: FEMA GRAS number: JECFA number: FL No: 14.140 CoE No:	3-Pentylpyridine	CCCCC1cccn1		<a href="https://foodb.ca/compounds/FDB013462">https://foodb.ca/compounds/FDB013462</a>
113	4673-31-8	225-122-3	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.143 CoE No: 11419	3-Propylpyridine	CCCc1cccn1		<a href="https://foodb.ca/compounds/FDB005085">https://foodb.ca/compounds/FDB005085</a>
114	1003-29-8	213-705-5	FEMA number: FEMA GRAS number: JECFA number:	Pyrrole-2- carbaldehyde	O=Cc1ccc[nH]1		<a href="https://foodb.ca/compounds/FDB014879">https://foodb.ca/compounds/FDB014879</a>

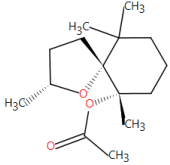
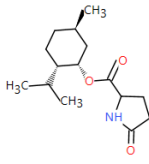
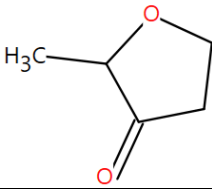
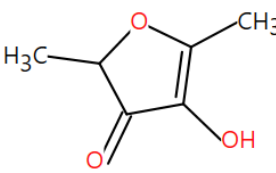
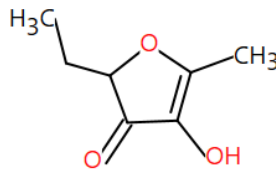
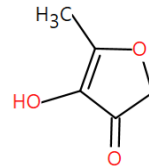
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116	108-75-8	203-613-3	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.150 CoE No:	2,4,6- Trimethylpyridine	Cc1cc(C)nc(C)c1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
117	7533-07-5	616-211-1	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.038 CoE No: 11589	2-Acetyl-4- methylthiazole	CC(=O)c1nc(C)cs1		<a href="https://foodb.ca/compounds/FDB004305">https://foodb.ca/compounds/FDB004305</a>
118	59303-17-2	970-994-7	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.039 CoE No:	2-Acetyl-5- methylthiazole	CC(=O)c1ncc(C)s1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
119	54411-06-2	611-139-7	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.043 CoE No:	2-Butyl-5- ethylthiophene	CCCCc1ccc(CC)s1		e-Flavis
120	37645-61-7	253-577-8	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.044 CoE No: 11597	2-Butylthiazole	CCCCc1nccs1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

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122	15729-76-7	239-823-7	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.052 CoE No:	2,5-Diethylthiazole	CCc1nc(CC)s1		<a href="https://foodb.ca/compounds/FDB019784">https://foodb.ca/compounds/FDB019784</a>
123	873-64-3	639-201-9	FEMA number: FEMA GRAS number: JECFA number: FL No:15.058 CoE No:	4,5-Dimethyl-2-ethylthiazole	CCc1nc(C)c(C)s1		<a href="https://foodb.ca/compounds/FDB019755">https://foodb.ca/compounds/FDB019755</a>
124	32272-57-4		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.061 CoE No:	2,5-Dimethyl-4-ethylthiazole	CCc1nc(C)sc1C		<a href="https://foodb.ca/compounds/FDB019756">https://foodb.ca/compounds/FDB019756</a>
125	541-58-2	208-786-9	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.062 CoE No: 11605	2,4-Dimethylthiazole	Cc1csc(C)n1		<a href="https://foodb.ca/compounds/FDB010961">https://foodb.ca/compounds/FDB010961</a>
126	638-02-8	211-313-9	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.064 CoE No:	2,5-Dimethylthiophene	Cc1ccc(C)s1		<a href="https://foodb.ca/compounds/FDB010966">https://foodb.ca/compounds/FDB010966</a>
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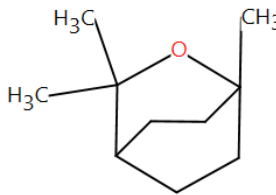
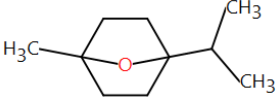
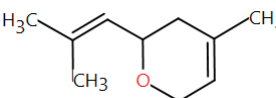
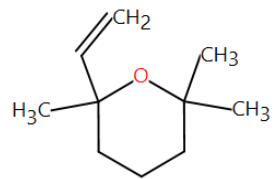
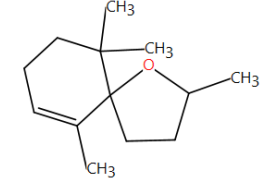
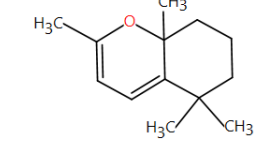
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129	40323-88-4	609-821-4	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.07 CoE No:	2-Ethyl-5- methylthiophene	CCc1ccc(C)s1		e-Flavis
130	15679-09-1	239-755-8	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.071 CoE No:	2-Ethylthiazole	CCc1nccs1		<a href="https://foodb.ca/compounds/FDB019722">https://foodb.ca/compounds/FDB019722</a>
131	872-55-9	212-830-2	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.072 CoE No: 11614	2-Ethylthiophene	CCc1cccs1		<a href="https://foodb.ca/compounds/FDB014059">https://foodb.ca/compounds/FDB014059</a>
132	36880-33-8	253-252-0	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.074 CoE No:	5-Ethylthiophene- 2-carbaldehyde	CCc1ccc(C=O)s1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
133	53498-30-9	671-357-3	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.080 CoE No:	2-Isopropyl-4,5- dimethylthiazole	CC(C)c1nc(C)c(C)s1		<a href="https://foodb.ca/compounds/FDB019761">https://foodb.ca/compounds/FDB019761</a>

134	86290-21-3		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.084 CoE No:	5-Methyl-2- pentylthiazole	CCCCCc1ncc(C)s1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
135	13679-83-9	844-998-3	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.085 CoE No: 11622	4-Methyl-2- propionylthiazole	CCC(=O)c1nc(C)cs1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
136	3581-87-1	222-702-8	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.089 CoE No: 11626	2-Methylthiazole	Cc1nccs1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
137	554-14-3	209-063-0	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.091 CoE No: 11631	2- Methylthiophene	Cc1cccs1		<a href="https://foodb.ca/compounds/FDB011118">https://foodb.ca/compounds/FDB011118</a>
138	616-44-4	210-482-6	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.092 CoE No: 11632	3- Methylthiophene	Cc1ccsc1		<a href="https://foodb.ca/compounds/FDB011119">https://foodb.ca/compounds/FDB011119</a>
139	880-36-4	212-913-3	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.093 CoE No:	2-Octylthiophene	CCCCCCCCc1cccs1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

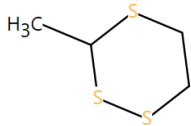
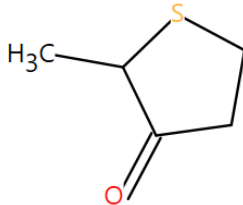
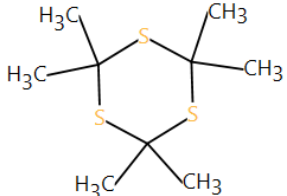
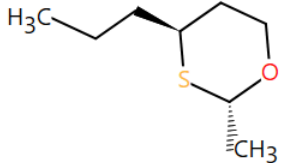
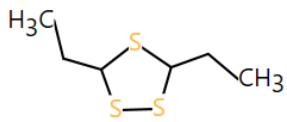
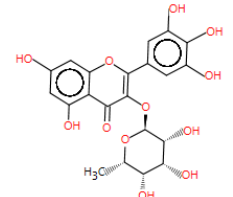
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141	17626-75-4	241-606-7	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.098 CoE No:	2-Propylthiazole	CCCc1nccs1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
142	98-03-3	202-629-8	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.107 CoE No:	Thiophene-2- carbaldehyde	O=Cc1cccs1		<a href="https://foodb.ca/compounds/FDB000911">https://foodb.ca/compounds/FDB000911</a> and <a href="https://foodb.ca/compounds/FDB004320">https://foodb.ca/compounds/FDB004320</a>
143	61323-24-8	262-709-3	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.115 CoE No:	2-Isobutyl-4- methyl thiazole	CC(C)Cc1nc(C)cs1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
144	233665-91-3		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.116 CoE No:	2-Acetyl-4- ethylthiazole	CCc1csc(n1)C(C)=O		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
145	53833-33-3		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.118 CoE No:	4-Butylthiazole	CCCCc1csn1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
146	110-86-1	203-809-9	FEMA number: FEMA GRAS number: JECFA number:	Pyridine	c1ccncc1		<a href="https://foodb.ca/compounds/FDB014733">https://foodb.ca/compounds/FDB014733</a>

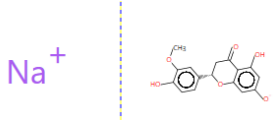
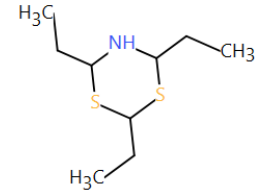
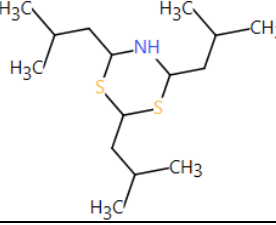
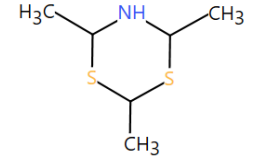
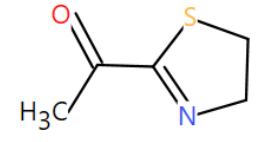
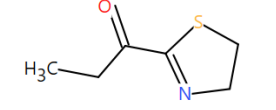
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147	57893-27-3 and 72541-09-4	261-005-3	FEMA number:3651 FEMA GRAS number: 13 JECFA number: 1647 FL No: 13.087 CoE No:	6-Acetoxydihydrotheaspirane	<chem>C[C@@H]1CC[C@]2(O1)C(C)(C)CCC[C@]2(C)OC(C)=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETOXYDIHYDROTHEASPIRANE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETOXYDIHYDROTHEASPIRANE</a>
148	52528-10-6		FEMA number:4155 FEMA GRAS number: 22 JECFA number:1858 FL No: CoE No:	Menthyl pyrrolidone carboxylate	<chem>CC(C)[C@@H]1CC[C@@H](C)C[C@H]1OC(=O)[C@H]1CCCC(=O)N1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MENTHYPYRROLIDONECARBOXYLATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MENTHYPYRROLIDONECARBOXYLATE</a>
149	3188-00-9	221-685-4	FEMA number:3373 FEMA GRAS number: 6, 7 JECFA number:1448 FL No: 13.042 CoE No: 2338	4,5-Dihydro-2-methylfuran-3(2H)-one	<chem>CC1OCCC1=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTETRAHYDROFURANONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTETRAHYDROFURANONE</a>
150	3658-77-3	222-908-8	FEMA number:3174 FEMA GRAS number: 4, 25 JECFA number: 1446 FL No: 13.010 CoE No: 536	4-Hydroxy-2,5-dimethylfuran-3(2H)-one	<chem>CC1OC(C)=C(O)C1=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYDIMETHYLFURANONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYDIMETHYLFURANONE</a>
151	27538-10-9 and 27538-09-6	248-514-6	FEMA number:3623 FEMA GRAS number: 12 JECFA number: 1449 FL No: 13.084 CoE No:	2-Ethyl-4-hydroxy-5-methyl-3(2H)-furanone	<chem>CCC1OC(C)C(=O)C=1O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLHYDROXYMETHYLFURANONE245">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLHYDROXYMETHYLFURANONE245</a>
152	19322-27-1	242-961-0	FEMA number:3635 FEMA GRAS number: 12 JECFA number: 1450 FL No: 13.085	4-Hydroxy-5-methylfuran-3(2H)-one	<chem>CC1OCC(=O)C=1O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYMETHY">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYMETHY</a>

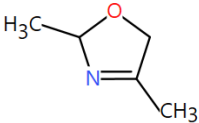
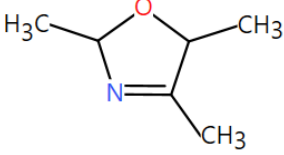
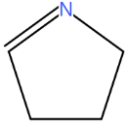
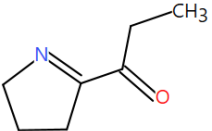
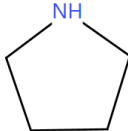
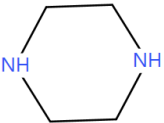
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153	4077-47-8	223-797-9	FEMA number:3664 FEMA GRAS number: 13 JECFA number: 1451 FL No: 13.089 CoE No:	2,5-Dimethyl-4-methoxyfuran-3(2H)-one	<chem>COC1C(=O)C(C)OC=1C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLMETHOXYHFURANONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLMETHOXYHFURANONE</a>
154	56058-69-6 and 7416-35-5	231-028-3	FEMA number:3665 FEMA GRAS number: 13, 25 JECFA number: 1452 FL No: 13.090 CoE No: 10937	2,2-Dimethyl-5-(1-methylprop-1-enyl)tetrahydrofuran	<chem>C1C=C(/C)C1CCC(C)(C)O1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLMETHYLPROPENYLTETRAHYDROFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLMETHYLPROPENYLTETRAHYDROFURAN</a>
155	41239-48-9	255-274-6	FEMA number:3743 FEMA GRAS number: 14 JECFA number: 1453 FL No: 13.095 CoE No: 11882	2,5-Diethyltetrahydrofuran	<chem>CCC1CCC(CC)O1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLTETRAHYDROFURAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLTETRAHYDROFURAN</a>
156	13679-86-2	237-184-9	FEMA number: FEMA GRAS number: JECFA number: 1455 FL No: 13.097 CoE No: 11944	Anhydrolinalool oxide (5)	<chem>CC(=C)C1CCC(C)(O1)C=C</chem>		<a href="https://foodb.ca/compounds/FDB016168">https://foodb.ca/compounds/FDB016168</a>
157	4166-20-5	609-950-6	FEMA number: 3797 FEMA GRAS number: 17 JECFA number: 1456 FL No: 13.099 CoE No:	4-Acetoxy-2,5-dimethylfuran-3(2H)-one	<chem>CC1OC(C)=C(OC(C)=O)C1=O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETOXYDIMETHYLFURANONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETOXYDIMETHYLFURANONE</a>
158	14049-11-7	237-889-1	FEMA number: 4593 FEMA GRAS number: 24 JECFA number: 2135 FL No: CoE No:	linalool oxide pyranoid	<chem>CC1(C)OC(C)(CCC1O)C=C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=LINALOOLOXIDEPYRANOID">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=LINALOOLOXIDEPYRANOID</a>

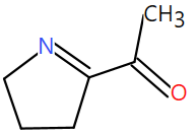
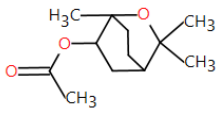
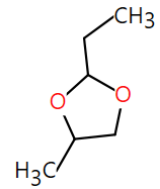
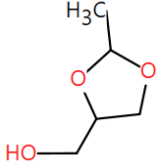
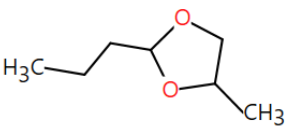
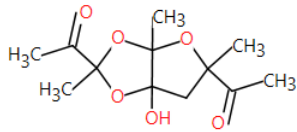
159	470-82-6 and 8024-53-1	207-431-5	FEMA number: 2465 FEMA GRAS number: 3, 25 JECFA number: 1234 FL No: 03.001 CoE No: 182	1,8-Cineole	<chem>CC1(C)OC2(C)CCC1CC2</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=EUCALYPTOL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=EUCALYPTOL</a>
160	470-67-7	207-428-9	FEMA number: 3658 FEMA GRAS number: 13, 25 JECFA number: 1233 FL No: 03.007 CoE No: 11225	1,4-Cineole	<chem>CC(C)[C@@]12CC[C@](C)(CC1)O2</chem>		<a href="https://foodb.ca/compounds/FDB014936">https://foodb.ca/compounds/FDB014936</a>
161	1786-08-9	217-241-4	FEMA number: 3661 FEMA GRAS number: 13, 25 JECFA number: 1235 FL No: 13.088 CoE No:	3,6-Dihydro-4-methyl-2-(2-methylprop-1-en-1-yl)-2H-pyran	<chem>CC(C)=CC1CC(C)=CCO1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIHYDROMETHYLMETHYLPROPENYLHPYRAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIHYDROMETHYLMETHYLPROPENYLHPYRAN</a>
162	7392-19-0 and 13837-56-4	230-983-3	FEMA number: 3735 FEMA GRAS number: 13 JECFA number: 1236 FL No: 13.094 CoE No: 10976	2,6,6-Trimethyl-2-vinyltetrahydropyran	<chem>CC1(C)CCCC(C)(O1)C=C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLVINYLTETRAHYDOPYRAN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLVINYLTETRAHYDOPYRAN</a>
163	36431-72-8	253-031-9	FEMA number: 3774 FEMA GRAS number: 15 JECFA number: 1238 FL No: 13.098 CoE No: 10515	Theaspirane	<chem>CC1CCC2(O1)C(C)=CC2(C)C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=THEASPIRANE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=THEASPIRANE</a>
164	5552-30-7	226-916-2	FEMA number: 3822 FEMA GRAS number: 18 JECFA number: 1239 FL No: 13.165 CoE No:	6,7,8,8a-Tetrahydro-2,5,5,8a-tetramethyl-5H-1-benzopyran	<chem>CC1OC2(C)CCCC(C)(C)C2=CC=1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CYCLOIONONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CYCLOIONONE</a>

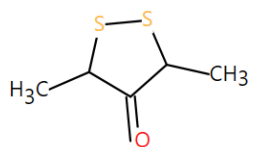
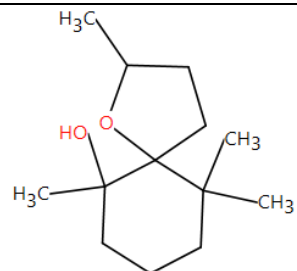
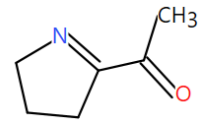

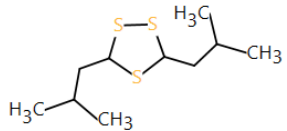
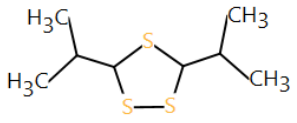
165	16409-43-1 and 876-17-5	240-457-5	FEMA number: FEMA GRAS number: JECFA number: 1237 FL No: 13.037 CoE No: 2269	2-(2-Methylprop- 1-enyl)-4- methyltetrahydrop yran	CC1CCOC(C1)C=C(C) C		<a href="https://foodb.ca/compounds/FDB006020">https://foodb.ca/compounds/FDB006020</a>
166	70786-44-6		FEMA number: FEMA GRAS number: JECFA number: FL No: 13.198 CoE No:	3,6-Dimethyl- 2,3,3a,4,5,7a- hexahydrobenzof uran	CC1COC2C=C(C)CCC1 2		<a href="https://foodb.ca/compounds/FDB003823">https://foodb.ca/compounds/FDB003823</a>
167	23654-92-4	245-808-6	FEMA number: 3541 FEMA GRAS number: 11 JECFA number: 573 FL No: 15.025 CoE No: 11883	3,5-Dimethyl- 1,2,4-trithiolane	CC1SSC(C)S1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLTRITHIOLANE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLTRITHIOLANE</a>
168	1003-04-9	213-698-9	FEMA number: 3266 FEMA GRAS number: 5 JECFA number: 498 FL No: 15.012 CoE No: 2337	4,5- Dihydrothiophen- 3(2H)-one	O=C1CCSC1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIHYDROTHIOPHENONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIHYDROTHIOPHENONE</a>
169	505-29-3	208-007-2	FEMA number: 3831 FEMA GRAS number: 18 JECFA number: 456 FL No: 15.066 CoE No:	1,4-Dithiane	S1CCSCC1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DITHIANE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DITHIANE</a>
170	5616-51-3	227-038-2	FEMA number: 3705 FEMA GRAS number: 13 JECFA number: 534 FL No: 15.034 CoE No:	2-Methyl-1,3- dithiolane	CC1SCCS1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLDITHIOLANE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLDITHIOLANE</a>

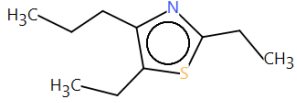
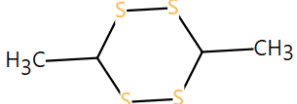
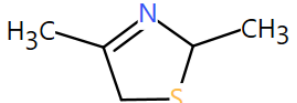
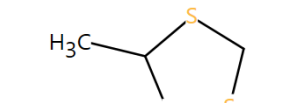
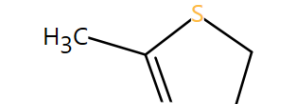
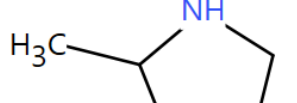
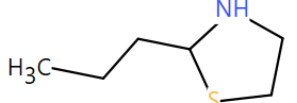
171	43040-01-3	256-056-3	FEMA number: 3718 FEMA GRAS number: 13 JECFA number: 574 FL No: 15.036 CoE No:	3-Methyl-1,2,4-trithiane	CC1SCCSS1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTRITHIANE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTRITHIANE</a>
172	13679-85-1	237-183-3	FEMA number: 3512 FEMA GRAS number: 10 JECFA number: 499 FL No: 15.023 CoE No: 11601	4,5-Dihydro-2-methylthiophene-3(2H)-one	CC1SCCC1=O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTETRAHYDROTHIOPHENONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLTETRAHYDROTHIOPHENONE</a>
173	828-26-2	212-582-5	FEMA number: 3475 FEMA GRAS number: 9 JECFA number: 543 FL No: 15.009 CoE No: 2334	Trithioacetone	CC1(C)SC(C)(C)SC(C)(C)S1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRITHIOACETONE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRITHIOACETONE</a>
174	67715-80-4	261-699-8	FEMA number: 3578 FEMA GRAS number: 11, 25 JECFA number: 464 FL No: 16.030 CoE No: 11540	2-Methyl-4-propyl-1,3-oxathiane	CCCC1CCOC(S1)C		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPROPYLOXATHIANE2413">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPROPYLOXATHIANE2413</a>
175	54644-28-9 and 54717-12-3	639-067-1	FEMA number: 4030 FEMA GRAS number: 21 JECFA number: 1686 FL No: 12.274 CoE No:	3,5-Diethyl-1,2,4-trithiolane	CCC1SS(CC)S1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLTRITHIOLANE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIETHYLTRITHIOLANE</a>
176	17912-87-7	241-856-7	FEMA number: 4491 FEMA GRAS number: 24 JECFA number: 2207 FL No: 12.274 CoE No:	Myricitrin	C[C@@H]1O[C@@H](OC2C(=O)c3c(O)cc(O)c3OC(=O)c2cc(O)c(O)c(O)c2)[C@H](O)[C@H](O)[C@H]1O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MYRICITRIN">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MYRICITRIN</a>

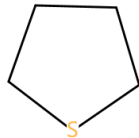
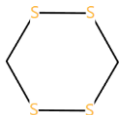
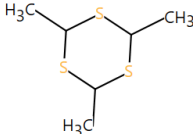
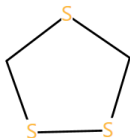
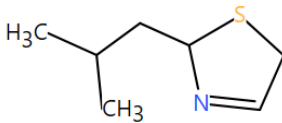
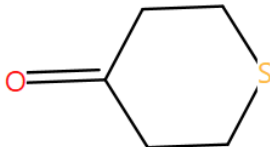
177	462631-45-4	639-081-8	FEMA number: 4228 FEMA GRAS number: JECFA number: 2256 FL No: 16.083 CoE No:	5,7-dihydroxy-2-(4-hydroxy-3-methoxyphenyl)-2,3-dihydro-4H-chromen-4-one sodium salt	[Na+].COc1cc(ccc1O)C1CC(=O)c2c(O)cc([O-])cc2O1		<a href="https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/6518">https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/6518</a>
178	54717-17-8	801-703-2	FEMA number: 4748 FEMA GRAS number: JECFA number: 2205 FL No: 15.054 CoE No:	Dihydro-2,4,6-triethyl-1,3,5(4H)-dithiazine	CCC1NC(CC)SC(CC)S1		<a href="https://www.fao.org/food/food-safety-quality/scientific-advice/jecfa/jecfa-flav/details/en/c/2178/">https://www.fao.org/food/food-safety-quality/scientific-advice/jecfa/jecfa-flav/details/en/c/2178/</a>
179	74595-94-1	457-290-0	FEMA number: 4017 FEMA GRAS number: 20 JECFA number: 1048 FL No: 15.054 CoE No:	5,6-Dihydro-2,4,6-tris(2-methylpropyl)4H-1,3,5-dithiazine	CC(C)CC1NC(CC(C)C)SC(CC(C)C)S1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIHYDROTRISMETHYLPROPYLDITHIAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIHYDROTRISMETHYLPROPYLDITHIAZINE</a>
180	638-17-5	211-323-3	FEMA number: 4018 FEMA GRAS number: 20 JECFA number: 1049 FL No: 15.109 CoE No: 11649	2,4,6-Trimethyldihydro-1,3,5(4H)-dithiazine	C[C@@H]1N[C@H](C)S[C@H](C)S1		<a href="https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/4777">https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/4777</a>
181	29926-41-8	629-682-3	FEMA number: 3817 FEMA GRAS number: 18 JECFA number: 1759 FL No: 15.010 CoE No: 2335	2-Acetyl-2-thiazoline	CC(=O)C1SCCN=1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLTHIAZOLINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLTHIAZOLINE</a>
182	29926-42-9	639-115-1	FEMA number: 4064 FEMA GRAS number: 21 JECFA number: 1760 FL No: 15.128 CoE No:	2-Propionyl-2-thiazoline	CCC(=O)C1SCCN=1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPIONYLTHIAZOLINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPIONYLTHIAZOLINE</a>

183	77311-02-5		FEMA number: 4429 FEMA GRAS number: 23 JECFA number: 1558 FL No: 13.115 CoE No:	2,4-Dimethyl-3-oxazoline	CC1OCC(C)=N1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLOXAZOLINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLOXAZOLINE</a>
184	22694-96-8	607-131-8	FEMA number: 3525 FEMA GRAS number: 10 JECFA number: 1559 FL No: 13.039 CoE No: 2319	2,4,5-Trimethyl-delta-3-oxazoline	CC1OC(C)C(C)=N1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLOXAZOLINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLOXAZOLINE</a>
185	5724-81-2	227-230-6	FEMA number: 3898 FEMA GRAS number: 18 JECFA number: 1603 FL No: 14.167 CoE No:	1-Pyrroline	C1CC=NC1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PYRROLINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PYRROLINE</a>
186	133447-37-7	639-056-1	FEMA number: 4063 FEMA GRAS number: 21 JECFA number: 1605 FL No: 14.168 CoE No:	2-Propionyl pyrroline 1% vegetable oil triglycerides	CCC(=O)C1CCCN=1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPIONYLPYRROLINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PROPIONYLPYRROLINE</a>
187	123-75-1	204-648-7	FEMA number: 3523 FEMA GRAS number: 10 JECFA number: 1609 FL No: 14.064 CoE No: 10491	Pyrrolidine	C1CCNC1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PYRROLIDINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PYRROLIDINE</a>
188	110-85-0	203-808-3	FEMA number: 4250 FEMA GRAS number: 22 JECFA number: 1615 FL No: 14.141 CoE No:	Piperazine	C1CNCCN1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PIPERAZINE</a>

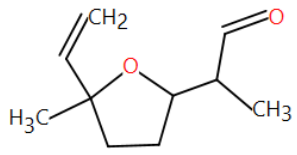
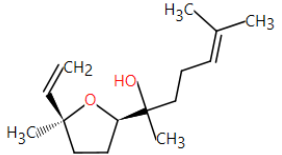
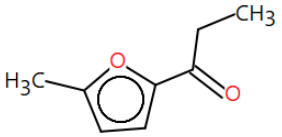
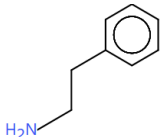
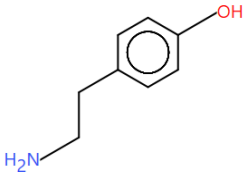
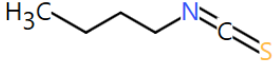
189	85213-22-5 and 99583-29-6	639-632-2	FEMA number: 4249 FEMA GRAS number: 22 JECFA number: 1604 FL No: 14.080 CoE No:	2-Acetyl-1- pyrroline	<chem>CC(=O)C1CCCN=1</chem>		<a href="https://www.hfpappex.ternal.fda.gov/scripts/fdccc/index.cfm?set=FoodSubstances&amp;id=ACETYLPIRROLI NE">https://www.hfpappex.ternal.fda.gov/scripts/fdccc/index.cfm?set=FoodSubstances&amp;id=ACETYLPIRROLI NE</a>
190	72257-53-5 and 57709-95-2	276-542-9	FEMA number: FEMA GRAS number: JECFA number: FL No: 3.008 CoE No:	2-Acetoxy-1,8- cineole	<chem>CC(=O)O[C@H]1C[C@@H]2CC[C@@]1(C)OC2(C)C</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
191	4359-46-0	224-435-2	FEMA number: FEMA GRAS number: JECFA number: FL No: 06.088 CoE No:	2-Ethyl-4-methyl- 1,3-dioxolane	<chem>CCC1OCC(C)O1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
192	3773-93-1 and 3674-21-3	821-391-1	FEMA number: FEMA GRAS number: JECFA number: FL No: 06.090 CoE No:	4- Hydroxymethyl- 2-methyl-1,3- dioxolane	<chem>CC1OCC(CO)O1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
193	4352-99-2	224-420-0	FEMA number: FEMA GRAS number: JECFA number: FL No: 06.095 CoE No:	dioxolane	<chem>CCCC1OCC(C)O1</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
194	18114-49-3 Class III		FEMA number: 4303 FEMA GRAS number: 23 JECFA number: 2039 FL No: 6.134 CoE No:	Diacetyl-trimer	<chem>CC(=O)C1(C)CC2(O)OC(C)(OC2(C)O1)C(C)=O</chem>		<a href="https://www.hfpappex.ternal.fda.gov/scripts/fdccc/index.cfm?set=FoodSubstances&amp;id=TETRAHYDROAH YDROXYATRIMET HYLFIURODIOXOL EDIYLBISETHANO NE">https://www.hfpappex.ternal.fda.gov/scripts/fdccc/index.cfm?set=FoodSubstances&amp;id=TETRAHYDROAH YDROXYATRIMET HYLFIURODIOXOL EDIYLBISETHANO NE</a>

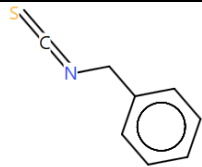
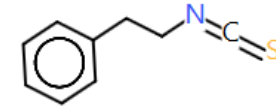
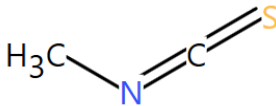
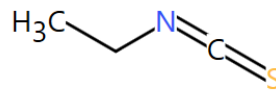
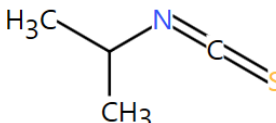
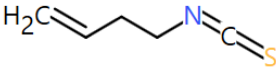
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196	53398-90-6 and 65620-50-0	639-190-0	FEMA number: 3549 FEMA GRAS number: 11 JECFA number: 1648 FL No: 13.076 CoE No: 11917	6- Hydroxydihydro- heaspirane	CC1CCC2(O1)C(C)(C)C CCC2(C)O		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYDIHYDROTHEASPIRANE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROXYDIHYDROTHEASPIRANE</a>
197	85213-22-5	639-632-2	FEMA number: 4249 FEMA GRAS number: 22 JECFA number: 1604 FL No: 14.080 CoE No:	2-Acetyl-1- pyrroline	CC(=O)C1CCC=N1		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLPYRROLINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ACETYLPYRROLINE</a>
198	142-08-5	276-824-1	FEMA number: FEMA GRAS number: JECFA number: FL No: 14.118 CoE No:	2- Hydroxypyridine	O=C1NC=CC=C1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
199	92900-67-9		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.047 CoE No:	3,5-Di-isobutyl- 1,2,4-trithiolane	CC(C)CC1SSC(CC(C)C) )S1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
200	54934-99-5		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.048 CoE No:	3,5-Di-isopropyl- 1,2,4-trithiolane	CC(C)C1SSC(S1)C(C)C		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>

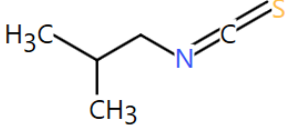
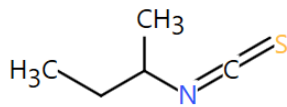
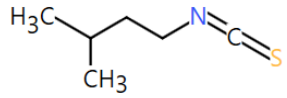
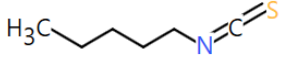
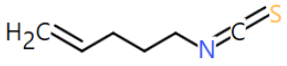
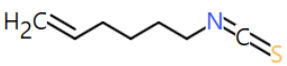
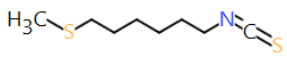
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202	67411-27-2		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.056 CoE No:	3,6-Dimethyl-1,2,4,5-tetrathiane	CC1SSC(C)SS1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
203	60755-05-7		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.060 CoE No:	2,4-Dimethyl-3-thiazoline	CC1SCC(C)=N1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
204	51647-38-2		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.083 CoE No:	3-Methyl-1,2,4-trithiolane	CC1SCSS1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
205	2346-00-1	219-071-6	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.060 CoE No:	2-Methyl-2-thiazoline	CC1SCCN=1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
206	24050-16-6		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.09 CoE No:	2-Methylthiazolidine	CC1NCCS1		e-Flavis
207	24050-10-0		FEMA number: FEMA GRAS number: JECFA number:	2-Propylthiazolidine	CCCC1NCCS1		e-Flavis

			FL No: 15.099 CoE No:				
208	110-01-0	203-728-9	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.099 CoE No:	Tetrahydrothiophene	C1CCSC1		e-Flavis
209	291-22-5		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.103 CoE No:	1,2,4,5-Tetrathiane	C1SSCSS1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
210	2765-04-0	245-870-4	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.110 CoE No:	2,4,6-Trimethyl-1,3,5-trithiane	CC1SC(C)SC(C)S1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
211	289-16-7		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.111 CoE No:	1,2,4-Trithiolane	C1SSCS1		<a href="https://foodb.ca/compounds/FDB019028">https://foodb.ca/compounds/FDB019028</a>
212	39800-92-5		FEMA number: FEMA GRAS number: JECFA number: FL No: 15.119 CoE No:	2-Isobutyl-3-thiazoline	CC(C)CC1SCC=N1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32012R0872</a>
213	1072-72-6	214-015-7	FEMA number: FEMA GRAS number: JECFA number: FL No: 15.125 CoE No:	4-Tetrahydrothiopyranone	O=C1CCSCC1		e-Flavis

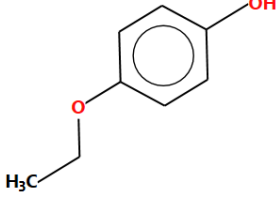
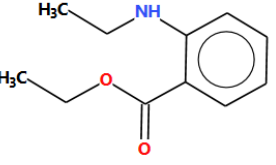
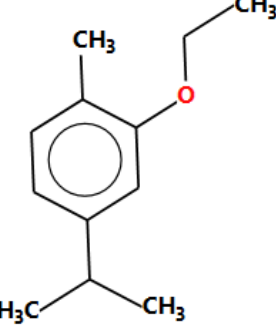
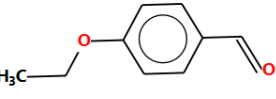
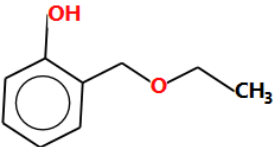


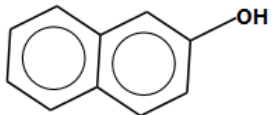
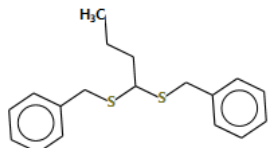
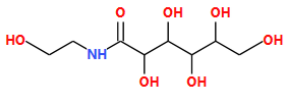
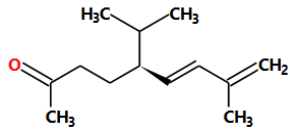
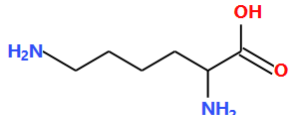
219	67920-63-2 and 51685-39-3		FEMA number: 4058 FEMA GRAS number: 21 JECFA number: 1457 FL No: 16.081 CoE No: 11819	2-(5-Methyl-5- vinyl- tetrahydrofuran-2- yl)propionaldehyd e	<chem>CC(C=O)C1CCC(C)(O1)C=C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLVINYLTETRAHYDROFURANYLPROPIONALDEHYDE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLVINYLTETRAHYDROFURANYLPROPIONALDEHYDE</a>
220	185253-84-3		FEMA number: 4549 FEMA GRAS number: JECFA number: FL No: CoE No:	Nerolidol oxide	<chem>CC(C)=CCCC(C)(O)[C@H]1CC[C@](C)(O1)C=C</chem>		e-Flavis
221	10599-69-6	234-215-8	FEMA number: FEMA GRAS number: JECFA number: FL No: 13.155 CoE No:	2-Methyl-5- propionylfuran	<chem>CCC(=O)c1ccc(C)o1</chem>		e-Flavis
222	64-04-0	2005744	FEMA number: 3220 FEMA GRAS number: 4 JECFA number: 1589 FL No: 11.006 CoE No: 708	PHENYLETHYL AMINE	<chem>NCCC1=CC=CC=C1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENETHYLAMINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENETHYLAMINE</a>
223	51-67-2	2001158	FEMA number: 4215 FEMA GRAS number: 22 JECFA number: 1590 FL No: 11.007 CoE No: 709	TYRAMINE	<chem>NCCc1ccc(O)cc1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TYRAMINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TYRAMINE</a>
224	592-82-5	2097704	FEMA number: 4082 FEMA GRAS number: 22 JECFA number: 1561 FL No: 12.107 CoE No: 11488	Butyl isothiocyanate	<chem>CCCCN=C=S</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTYLISOTHIOCYANATE</a>

225	622-78-6	210-753-9	FEMA number: 4428 FEMA GRAS number: 23 JECFA number: 1562 FL No: 12.102 CoE No: 11863	Benzyl isothiocyanate	<chem>S=C=NCc1ccccc1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZYLISOTHIOCYANATE</a>
226	2257-09-2	218-855-5	FEMA number: 4014 FEMA GRAS number: 20 JECFA number: 1563 FL No: 12.193 CoE No: 11495	Phenethyl isothiocyanate	<chem>S=C=NCCc1ccccc1</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENETHYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENETHYLISOTHIOCYANATE</a>
227	556-61-6	209-132-5	FEMA number: 4426 FEMA GRAS number: 23 JECFA number: 1884 FL No: CoE No:	Methyl isothiocyanate	<chem>CN=C=S</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLISOTHIOCYANATE</a>
228	542-85-8	208-831-2	FEMA number: 4420 FEMA GRAS number: 23 JECFA number: 1885 FL No: CoE No:	Ethyl isothiocyanate	<chem>CCN=C=S</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLISOTHIOCYANATE</a>
229	2253-73-8	218-851-3	FEMA number: 4425 FEMA GRAS number: 23 JECFA number: 1888 FL No: CoE No	Isopropyl isothiocyanate	<chem>CC(C)N=C=S</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOPROPYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOPROPYLISOTHIOCYANATE</a>
230	3386-97-8	222-209-8	FEMA number: 4418 FEMA GRAS number: 23 JECFA number: 1889 FL No: 12.283 CoE No	3-Butenyl isothiocyanate	<chem>C=CCCN=C=S</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTENYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTENYLISOTHIOCYANATE</a>

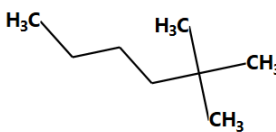
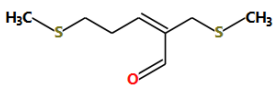
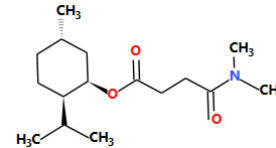
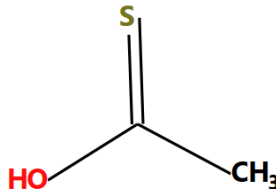
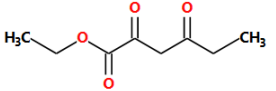
231	591-82-2	209-733-2	FEMA number: 4424 FEMA GRAS number: 23 JECFA number: 1886 FL No: CoE No	Isobutyl thiocyanate	CC(C)CN=C=S		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOBUTYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOBUTYLISOTHIOCYANATE</a>
232	4426-79-3	224-609-8	FEMA number: 4419 FEMA GRAS number: 23 JECFA number: 1890 FL No: CoE No	2- Butylisothiocyana te	CC(N=C=S)CC		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTYLISOTHIOCYANATE2">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTYLISOTHIOCYANATE2</a>
233	628-03-5	671-299-9	FEMA number: 4423 FEMA GRAS number: 23 JECFA number: 1887 FL No: CoE No	Isoamyl isothiocyanate	CC(C)CCN=C=S		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOAMYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOAMYLISOTHIOCYANATE</a>
234	629-12-9	211-075-6	FEMA number: 4417 FEMA GRAS number: 23 JECFA number: 1891 FL No: CoE No	Amyl isothiocyanate	CCCCCN=C=S		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=AMYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=AMYLISOTHIOCYANATE</a>
235	18060-79-2	678-555-9	FEMA number: 4427 FEMA GRAS number: 23 JECFA number: 1893 FL No: CoE No	4-Pentenyl isothiocyanate	C=CCCCN=C=S		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTENYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PENTENYLISOTHIOCYANATE</a>
236	49776-81-0		FEMA number: 4421 FEMA GRAS number: 23 JECFA number: 1894 FL No: CoE No	5-Hexenyl isothiocyanate	C=CCCCCCN=C=S		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEXENYLISOTHIOCYANATE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HEXENYLISOTHIOCYANATE</a>
237	4430-39-1	861-180-1	FEMA number: 4415 FEMA GRAS number: 23 JECFA number: 1897	6- (Methylthio)hexyl isothiocyanate	CSCCCCCCN=C=S		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=</a>

			FL No: CoE No:				METHYLTHIOHEXYLISOTHIOCYANATE
238	87061-04-9	2892962	FEMA number: 3784 FEMA GRAS number: 16, 25 JECFA number: 1408 FL No: 02.224 CoE No:	3-(1-Methoxy)propane-1,2-diol	<chem>OCC(COC1CC(C)CCC1C(C)C)O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHOXYPROPANEDIOL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHOXYPROPANEDIOL</a>
239	7492-67-3	231-324-2	FEMA number: 2310 FEMA GRAS number: 3, 25 JECFA number: 592 FL No: 05.079 CoE No: 2012	Citronellyl oxycetaldehyde	<chem>CC(CCOC=O)CCC=C(C)C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CITRONELLOXYACETALDEHYDE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CITRONELLOXYACETALDEHYDE</a>
240	195863-84-4		FEMA number: 3849 FEMA GRAS number: 18 JECFA number: 1411 FL No: 02.254 CoE No:	(1R, 2S, 5S)-3-Methoxy-2-methylpropane-1,2-diol	<chem>CC(C)C1CCC(C)CC1OC(C)O</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHOXYMETHYLPROPANEDIOL">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHOXYMETHYLPROPANEDIOL</a>
241	72797-16-1	276-847-7	FEMA number: 4632 FEMA GRAS number: 24 JECFA number: 2129 FL No: CoE No:	2-Ethoxy-3-isopropylpyrazine	<chem>CCOC1ccnc1C(C)C</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHOXYISOPROPYLPYRAZINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHOXYISOPROPYLPYRAZINE</a>
242	5422-34-4	226-546-1	FEMA number: 4256 FEMA GRAS number: 23, 24 JECFA number: 1774 FL No: CoE No	N-(2-Hydroxyethyl)lactamide 2-Lactamidoethanol	<chem>CC(O)C(=O)NCCO</chem>		<a href="https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=LACTOYLETHANOLAMINE">https://www.hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=LACTOYLETHANOLAMINE</a>

243	622-62-8	210-748-1	FEMA number: 3695 FEMA GRAS number: 13, 25 JECFA number: 720 FL No: CoE No	4-Ethoxyphenol	CCOc1ccc(O)cc1		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROQUINONEMONOETHYLETHER">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=HYDROQUINONEMONOETHYLETHER</a>
244	38446-21-8	253-935-3	FEMA number: 4115 FEMA GRAS number: 22 JECFA number: 1547 FL No: CoE No	ethyl 2-(ethylamino)benzoate	CCNc1ccccc1C(=O)OCC		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLETHYLANTHRANILATE">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLETHYLANTHRANILATE</a>
245	4732-13-2	225-238-4	FEMA number: 2246 FEMA GRAS number: 3 JECFA number: 1247 FL No: CoE No	Carvacryl ethyl ether	CCOc1cc(ccc1C)C(C)C		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CARVACRYLETHYLETHER">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CARVACRYLETHYLETHER</a>
246	10031-82-0	233-093-3	FEMA number: 2413 FEMA GRAS number: 3, 25 JECFA number: 879 FL No: CoE No	4-ethoxybenzaldehyde	CCOc1ccc(C=O)cc1		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHOXYBENZALDEHYDE">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHOXYBENZALDEHYDE</a>
247	20920-83-6		FEMA number: 3485 FEMA GRAS number: 10 JECFA number: 714 FL No: CoE No	2-(Ethoxymethyl)phenol	CCOCc1ccccc1O		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHOXYMETHYLPHENOL">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHOXYMETHYLPHENOL</a>

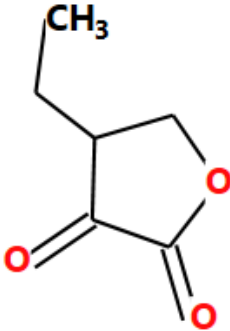
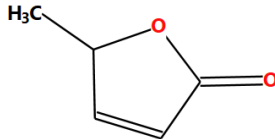
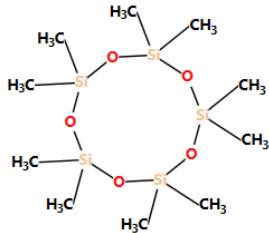
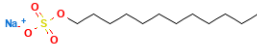
248	135-19-3	205-182-7	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No	2-NAPHTHOL	Oc1ccc2ccccc2c1		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=IndirectAdditives&amp;id=NAPHTHOL">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=IndirectAdditives&amp;id=NAPHTHOL</a> , <a href="https://foodb.ca/compounds/FDB000877">https://foodb.ca/compounds/FDB000877</a> and <a href="https://www.hmdb.ca/metabolites/HMDB0012322?utm_source=chatgpt.com">https://www.hmdb.ca/metabolites/HMDB0012322?utm_source=chatgpt.com</a>
249	101780-73-8		FEMA number: 4589 FEMA GRAS number: 24 JECFA number: 1939 FL No: CoE No	Butanal dibenzyl thioacetal	CCCC(SCc1ccccc1)SCc1ccccc1		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTANALDIBENZYLTHIOACETAL">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTANALDIBENZYLTHIOACETAL</a>
250	686298-93-1		FEMA number: 4254 FEMA GRAS number: JECFA number: 1772 FL No: CoE No	N-(2-Hydroxyethyl)hexonamide	OCCNC(=O)C(O)C(O)C(O)C(O)CO		<a href="https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/5787">https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/5787</a> and <a href="https://www.femaflavor.org/flavor-library/n-gluconyl-ethanolamine">https://www.femaflavor.org/flavor-library/n-gluconyl-ethanolamine</a>
251	2278-53-7	218-907-7	FEMA number: 4331 FEMA GRAS number: 23 JECFA number: 1840 FL No: CoE No	(5 <i>R</i> ,6 <i>E</i> )-8-methyl-5-propan-2-ylnona-6,8-dien-2-one	CC(C)[C@@H](CCC(C)=O)\C=C\C(C)=C		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOPROPYLMETHYLNONADIENONE">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOPROPYLMETHYLNONADIENONE</a>
252	70-54-2	200-740-6	FEMA number: 4331 FEMA GRAS number: 23 JECFA number: 1840 FL No: CoE No	Endolysin ,DL-Lysine, 2,6-diaminohexanoic acid	NCCCCC(N)C(O)=O		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=GRASNotices&amp;id=802">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=GRASNotices&amp;id=802</a>

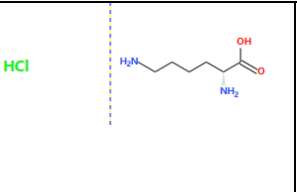
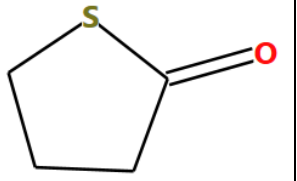
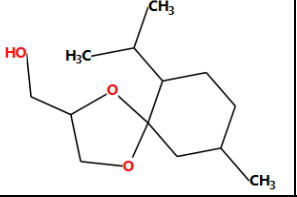
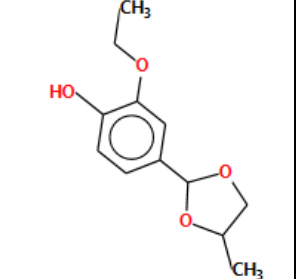
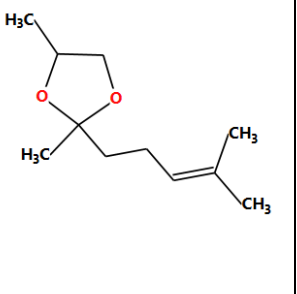
253	5435-64-3	226-603-0	FEMA number: 3524 FEMA GRAS number: 10 JECFA number: 269 FL No: CoE No	3,5,5-Trimethylhexanal	CC(CC=O)CC(C)(C)C		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLHEXANAL">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLHEXANAL</a>
254	3452-97-9	222-376-7	FEMA number: 3324 FEMA GRAS number: 5, 25 JECFA number: 268 FL No: CoE No	3,5,5-trimethylhexan-1-ol	CC(CCO)CC(C)(C)C		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLHEXANOL">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TRIMETHYLHEXANOL</a>
255	58430-94-7	254-898-6	FEMA number: FEMA GRAS number: JECFA number: FL No: 09.819 CoE No	3,5,5-Trimethylhexyl acetate	CC(CCOC(C)=O)CC(C)(C)C		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32012R0872</a>
256	464-07-3	207-347-9	FEMA number: FEMA GRAS number: JECFA number: FL No: 02.142 CoE No	3,3-dimethylbutan-2-ol	CC(O)C(C)(C)C		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>
257	462-95-3	207-330-6	FEMA number: FEMA GRAS number: JECFA number: FL No: 06.064 CoE No: 10012	Diethoxymethane	CCOCOC		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>
258	6846-50-0	229-934-9	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	TRIMETHYL PENTANYL DIISOBUTYRATE	CC(C)C(OC(=O)C(C)C)C(C)(C)COC(=O)C(C)C		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=CEDI&amp;sort=Substance&amp;order=ASC&amp;startrow=1&amp;type=basic&amp;search=6846-50-0">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=CEDI&amp;sort=Substance&amp;order=ASC&amp;startrow=1&amp;type=basic&amp;search=6846-50-0</a> and <a href="https://hfpappexternal.fda.gov/scripts/fdcc/i">https://hfpappexternal.fda.gov/scripts/fdcc/i</a>

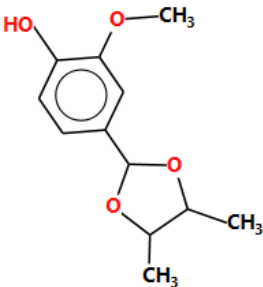
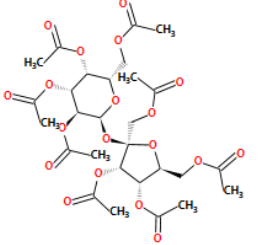
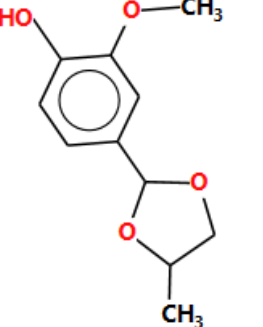
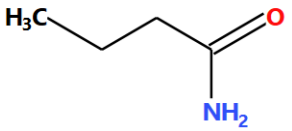
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260	59902-01-1	261-978-4	FEMA number: 3483 FEMA GRAS number: 10 JECFA number: 471 FL No: CoE No:	(E)-5-methylsulfanyl-2-(methylsulfanyl methyl)pent-2-enal	CSCCC=C(CSC)C=O		<a href="https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DITHIANONENCARBOXALDEHYDE">https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DITHIANONENCARBOXALDEHYDE</a>
261	544714-08-1	611-161-7	FEMA number: 4230 FEMA GRAS number: JECFA number: 1602 FL No: CoE No:	N,N-Dimethylmenthyl succinamide	CC(C)[C@@H]1CC[C@@H](C)C[C@H]1OC(=O)CCC(=O)N(C)C		<a href="#">CELEX 32012R0872 EN TXT.pdf</a>
262	507-09-5	208-063-8	FEMA number: 4210 FEMA GRAS number: 22 JECFA number: 1676 FL No: CoE No:	THIOACETIC ACID	CC(O)=S		<a href="https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=THIOACETICACID">https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=THIOACETICACID</a>
263	13246-52-1	236-228-4	FEMA number: 3278 FEMA GRAS number: 5 JECFA number: 603 FL No: CoE No:	Ethyl 2,4-dioxohexanoate	CCOC(=O)C(=O)CC(=O)CC		<a href="https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLDIOXOHEXANOATE">https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLDIOXOHEXANOATE</a>

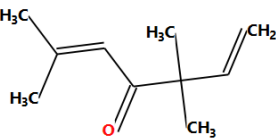
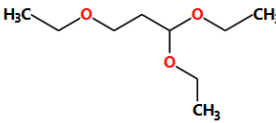
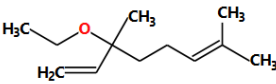
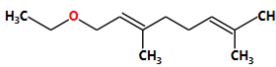
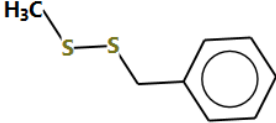
264	54957-02-7	639-065-0	FEMA number: 3509 FEMA GRAS number: 10 JECFA number: 547 FL No: CoE No:	3-((2-Mercapto-1-methylpropyl)thio)-2-butanol	CC(O)C(C)SC(C)C(C)S		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLHYDROXYPROPYLEMETHYLMERCAPTOPROPYLSULFIDE">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLHYDROXYPROPYLEMETHYLMERCAPTOPROPYLSULFIDE</a>
265	1205-17-0	214-881-6	FEMA number: 4599 FEMA GRAS number: 24 JECFA number: 547 FL No: CoE No:	Helional, 2-Methyl-3-(3,4-Methylenedioxyphenyl)Propanal	CC(Cc1ccc2OCOc2c1)C=O		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLENEDIOXYPHENYLMETHYLPROPANAL">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLENEDIOXYPHENYLMETHYLPROPANAL</a>
266	2568-25-4		FEMA number: 2130 FEMA GRAS number: 3, 25 JECFA number: 839 FL No: CoE No:	Benzaldehyde propylene glycol acetal 1,3-Dioxolane, 4-methyl-2-phenyl-	CC1COC(O1)c1ccccc1		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZALDEHYDEPROPYLENEGLYCOLACETAL">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZALDEHYDEPROPYLENEGLYCOLACETAL</a>
267	5468-06-4		FEMA number: 2875 FEMA GRAS number: 3 JECFA number: 1005 FL No: CoE No:	2-Benzyl-4,5-dimethyl-1,3-dioxolane	CC1OC(Cc2ccccc2)OC1C		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENYLACETALDEHYDEBUTYLENEGLYCOLACETAL">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENYLACETALDEHYDEBUTYLENEGLYCOLACETAL</a>
268	1708-40-3	216-963-7	FEMA number: FEMA GRAS number: JECFA number: 838 FL No: 06.002 CoE No: 36	2-Phenyl-1,3-dioxan-5-ol; 1,3-Dioxan-5-ol, 2-phenyl-	OC1COC(OC1)c1ccccc1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>

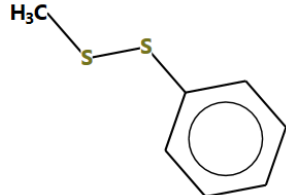
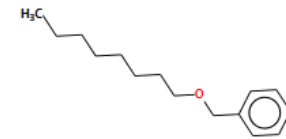
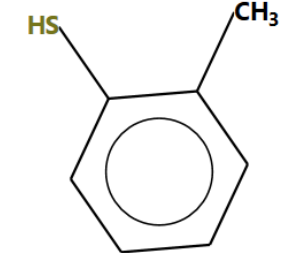
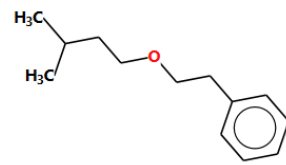
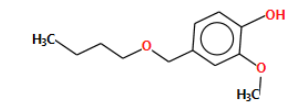
269	5694-82-6	227-166-9	FEMA number: 4486 FEMA GRAS number: 24 JECFA number: FL No: CoE No:	1,3-Dioxolane-4-methanol, 2-(2,6-dimethyl-1,5-heptadien-1-yl)-	<chem>CC(C)=CCCC(C)=CC1OCC(CO)O1</chem>		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CITRALGLYCERYLACETAL">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=CITRALGLYCERYLACETAL</a>
270	55704-78-4	259-770-3	FEMA number: 3450 FEMA GRAS number: 9, 25 JECFA number: 562 FL No: CoE No:	2,5-dimethyl-1,4-dithiane-2,5-diol	<chem>CC1(O)CSC(C)(O)CS1</chem>		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLDIHYDROXYDITHIANE">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLDIHYDROXYDITHIANE</a>
271	58244-29-4	261-183-2	FEMA number: 4628 FEMA GRAS number: 24 JECFA number: 2067 FL No: CoE No:	4-methyl-2-(4-methylphenyl)-1,3-dioxolane	<chem>CC1COC(O1)c1ccc(C)c1</chem>		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLBENZALDEHYDEPROPYLENEGLYCOLACETAL">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLBENZALDEHYDEPROPYLENEGLYCOLACETAL</a>
272	94089-21-1	302-121-7	FEMA number: 4272 FEMA GRAS number: 23 JECFA number: 1801 FL No: CoE No:	(E)-4-Methyl-2-(pent-1-enyl)-1,3-dioxolane	<chem>CCC\C=C\C1OCC(C)O1</chem>		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;sort=Sorterm_ID&amp;order=ASC&amp;startrow=1&amp;type=basic&amp;search=94089-21-1">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;sort=Sorterm_ID&amp;order=ASC&amp;startrow=1&amp;type=basic&amp;search=94089-21-1</a> and <a href="https://apps.who.int/food-additives-">https://apps.who.int/food-additives-</a>

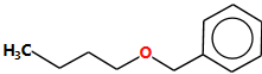
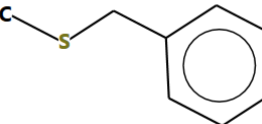
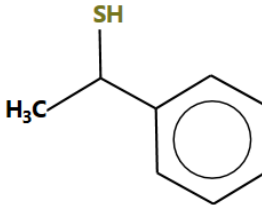
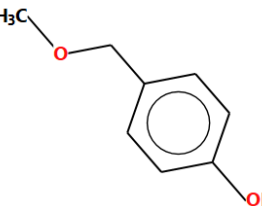
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273	923291-29-6		FEMA number: 4460 FEMA GRAS number: 24 JECFA number: 1986 FL No: CoE No:	2-Oxo-3-ethyl-4-butanolide	CCC1COC(=O)C1=O		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=OXOETHYLBUTANOLIDE">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=OXOETHYLBUTANOLIDE</a>
274	591-11-7, 1333-38-6	209-700-2	FEMA number: 4438 FEMA GRAS number: 24 JECFA number: 2000 FL No: CoE No:	5-Methylfuran-2(5H)-one	CC1OC(=O)C=C1		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ANGELICALACTONE">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ANGELICALACTONE</a>
275	541-02-6	208-764-9	FEMA number: 4438 FEMA GRAS number: 24 JECFA number: 2000 FL No: CoE No:	Dimethylsiloxane pentamer	C[Si]1(C)O[Si](C)(C)O[Si](C)(C)O[Si](C)(C)O[Si](C)(C)O1		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=CEDI&amp;sort=Substance&amp;order=ASC&amp;startrow=1&amp;type=basic&amp;search=541-02-6">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=CEDI&amp;sort=Substance&amp;order=ASC&amp;startrow=1&amp;type=basic&amp;search=541-02-6</a>
276	151-21-3	205-788-1	FEMA number: 4437 FEMA GRAS number: 24 JECFA number: FL No: CoE No:	Sodium dodecyl sulfate	[Na+].CCCCCCCCCCCOS(=O)(=O)[O-]		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=SODIUMLAURYL SULFATE">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=SODIUMLAURYL SULFATE</a> and <a href="https://www.femaflavor.org/flavor-library/sodium-lauryl-sulfate">https://www.femaflavor.org/flavor-library/sodium-lauryl-sulfate</a>

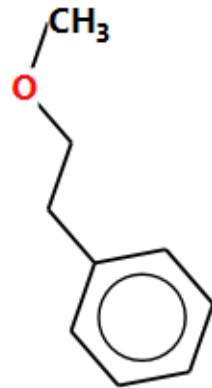
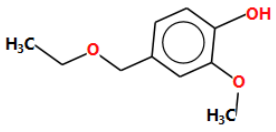
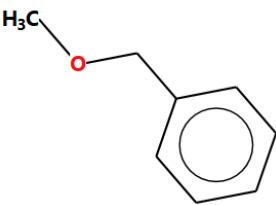
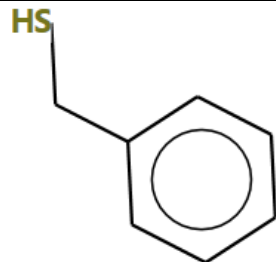
277	657-27-2	211-519-9	FEMA number: FEMA GRAS number: JECFA number: FL No: 17.031 CoE No: 11947	L-Lysine hydrochloride	Cl.NCCCC[C@H](N)C(O)=O		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>
278	1003-10-7	213-700-8	FEMA number: 4570 FEMA GRAS number: 24 JECFA number: 1923 FL No: CoE No:	4- Butyrothiolactone; Thiolan-2-one	O=C1CCCS1		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=OXOTHIOLANE">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=OXOTHIOLANE</a>
279	63187-91-7	408-200-3	FEMA number: 3808 FEMA GRAS number: 17 JECFA number: 445 FL No: CoE No:	Menthone 1,2- glycerol ketal; Menthone glycerin acetal	CC(C)C1CCC(C)CC21OCC(CO)O2		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MENTHONEGLYCEROLKETAL">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MENTHONEGLYCEROLKETAL</a>
280	68527-76-4	271-281-7	FEMA number: 3838 FEMA GRAS number: 18 JECFA number: 954 FL No: CoE No:	2-Ethoxy-4-(4- methyl-1,3- dioxolan-2- yl)phenol; Ethyl vanillin propylene glycol acetal	CCOC1cc(ccc1O)C1OC(C)O1		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLVANILLINPROPYLENEGLYCOLACETAL">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLVANILLINPROPYLENEGLYCOLACETAL</a>
281	68258-95-7	269-499-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	2,4-Dimethyl- 2-(4- methylpent-3- enyl)-1,3- dioxolane; 6-methyl-5- hepten-2-one propylene glycol acetal	CC1COC(C)(CCC=C(C)C)O1		<a href="https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/5998">https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/5998</a>

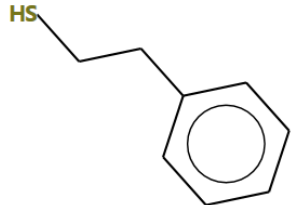
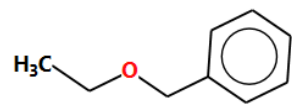
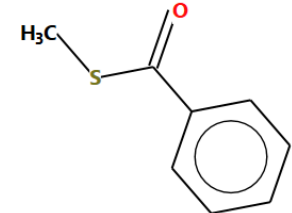
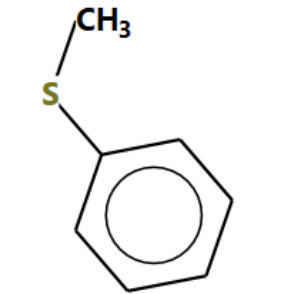
282	63253-24-7		FEMA number: 4023 FEMA GRAS number: 20 JECFA number: 960 FL No: CoE No:	Vanillin 1,2-butylene glycol acetal; Vanillin butane-2,3-diol acetal	<chem>COc1cc(ccc1O)C1OC(C)C(C)O1</chem>		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VANILLINBUTYLENEGLYCOLACETAL">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VANILLINBUTYLENEGLYCOLACETAL</a> and <a href="https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/2839">https://apps.who.int/food-additives-contaminants-jecfa-database/Home/Chemical/2839</a>
283	126-14-7	204-772-1	FEMA number: 3038 FEMA GRAS number: 3 JECFA number: 960 FL No: 16.081 CoE No: 11819	SUCROSE OCTAACETATE; Octaacetylsucrose	<chem>CC(=O)OC[C@H]1O[C@@H](O[C@]2(COC(C)=O)O[C@H](COC(C)=O)[C@@H](OC(C)=O)[C@@H]2OC(C)=O)[C@H](OC(C)=O)[C@@H](OC(C)=O)[C@@H]1OC(C)=O</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a> and <a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=SUCROSEOCTAACETATE">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=SUCROSEOCTAACETATE</a>
284	68527-74-2	271-279-6	FEMA number: 3905 FEMA GRAS number: 18 JECFA number: 1882 FL No: CoE No:	Vanillin propylene glycol acetal; Vanillin propyleneglycol acetal	<chem>COc1cc(ccc1O)C1OCC(C)O1</chem>		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VANILLINPROPYLENEGLYCOLACETAL">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VANILLINPROPYLENEGLYCOLACETAL</a>
285	541-35-5	208-776-4	FEMA number: 4252 FEMA GRAS number: 22 JECFA number: 1593 FL No:	n-Butyramide; Butanimidic acid	<chem>CCCC(N)=O</chem>		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTYRAMIDE">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BUTYRAMIDE</a>

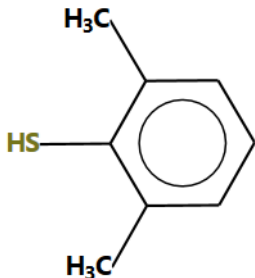
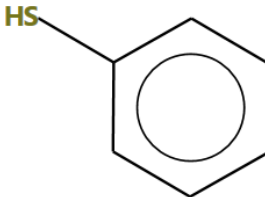
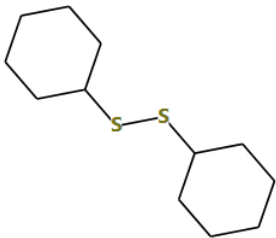
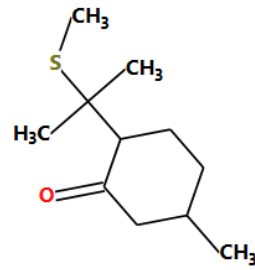
			CoE No:				
286	546-49-6	208-903-3	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No: 07.204	Artemisia ketone; 3,3,6- Trimethylhepta -1,5-dien-4- one	<chem>CC(C)=CC(=O)C(C)(C)C=C</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a> and <a href="https://foodb.ca/compounds/FDB014849">https://foodb.ca/compounds/FDB014849</a>
287	7789-92-6	232-193-4	FEMA number: FEMA GRAS number: JECFA number: FL No: 06.097 CoE No: 10075	3- Ethoxypropion aldehyde diethyl acetal, Propane; 1,1,3-triethoxy- and 1,3,3- Triethoxypropa ne	<chem>CCOCCC(OCC)OCC</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>
288	72845-33-1	615-854-5	FEMA number:4591 FEMA GRAS number: 24 JECFA number: 2134 FL No: CoE No:	3-Ethoxy-3,7- dimethyl-1,6- octadiene; linalyl ethyl ether	<chem>CCOC(C)(CCC=C(C)C)C=C</chem>		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLINALYLETHER">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLINALYLETHER</a>
289	22882-91-3; 40267-72-9	245-288-0	FEMA number FEMA GRAS number: JECFA number: FL No: 03.015 CoE No:	2,6-Octadiene, 1-ethoxy-3,7- dimethyl-, (2E)-; (2E)-1-Ethoxy- 3,7-dimethyl- 2,6-octadiene	<chem>CCOCC=C(C)CCC=C(C)C</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>
290	699-10-5	211-826-8	FEMA number: 3504 FEMA GRAS number: 10 JECFA number: 577 FL No: CoE No:	Benzyl methyl disulfide; Methyl benzyl disulfide	<chem>CSSCc1ccccc1</chem>		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLBENZYLDISULFIDE">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLBENZYLDISULFIDE</a>

291	14173-25-2	238-020-9	FEMA number: 3872 FEMA GRAS number: 18 JECFA number: 576 FL No: CoE No:	Disulfide, methyl phenyl, Methyl phenyl disulphide	CSSc1ccccc1		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPHENYLDISULFIDE">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPHENYLDISULFIDE</a>
292	54852-64-1		FEMA number: FEMA GRAS number: JECFA number: FL No: 03.012 CoE No:	Benzyl octyl ether; Octyl benzyl ether	CCCCCCCCOCc1ccccc1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>
293	137-06-4	205-276-8	FEMA number: 3240 FEMA GRAS number: 4 JECFA number: 528 FL No: 12.027 CoE No: 2272	2-Methylbenzenethiol; o-Toluenethiol	Cc1ccccc1S		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TOLUENETHIOL">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=TOLUENETHIOL</a> and <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>
294	56011-02-0	259-943-3	FEMA number: 4635 FEMA GRAS number: 24 JECFA number: 2136 FL No: CoE No:	Isopentyl phenethyl ether; green ether; Isoamyl phenylethyl ether	CC(C)CCOCCc1ccccc1		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOAMYLPHENETHYLETHER">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ISOAMYLPHENETHYLETHER</a>
295	82654-98-6	444-010-7	FEMA number: 3796 FEMA GRAS number: 16, 25 JECFA number: 888 FL No: CoE No:	Vanillyl butyl ether; 4-(Butoxymethyl)-2-methoxyphenol	CCCCOCc1ccc(O)c(OC)c1		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VANILLYLBUTYLETHER">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VANILLYLBUTYLETHER</a>

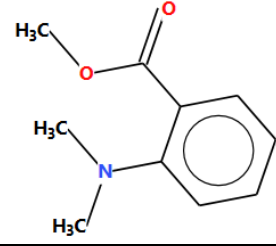
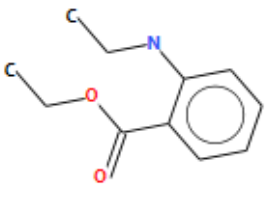
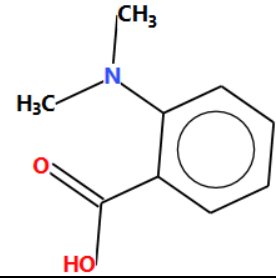
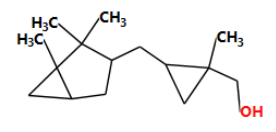
296	588-67-0	209-626-0	FEMA number: 2139 FEMA GRAS number: 3 JECFA number: 1253 FL No: CoE No:	Benzyl butyl ether (Butoxymethyl) benzene	CCCCOCc1ccccc1		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZYL BUTYLETHER">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZYL BUTYLETHER</a>
297	766-92-7	212-174-7	FEMA number: 3597 FEMA GRAS number: 12 JECFA number: 460 FL No: CoE No:	Methyl benzyl sulfide Benzyl methyl sulphide	CSCc1ccccc1		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZYL METHYLSULFIDE">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZYL METHYLSULFIDE</a>
298	6263-65-6	613-066-6	FEMA number: 2139 FEMA GRAS number: 21 JECFA number: 1665 FL No: CoE No:	1-Phenylethanol	CC(S)c1ccccc1		<a href="https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENYLETHANOL">https://hfpappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENYLETHANOL</a>
299	5355-17-9	226-334-9	FEMA number: FEMA GRAS number: JECFA number: FL No: 04.092 CoE No:	Phenol, 4-(methoxymethyl)-; p-(methoxymethyl)phenol	COCc1ccc(O)cc1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>

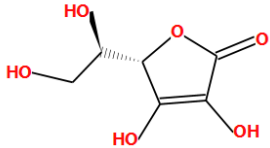
300	3558-60-9	222-619-7	FEMA number: 3198 FEMA GRAS number: 4 JECFA number: 1254 FL No: CoE No:	2-Phenylethyl methyl ether; Methyl phenethyl ether	COCCc1ccccc1		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPHENETHYLETHER">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPHENETHYLETHER</a>
301	13184-86-6	236-136-4	FEMA number: 3815 FEMA GRAS number: 17, 22 JECFA number: 887 FL No: CoE No:	Vanillyl ethyl ether; Phenol, 4-(ethoxymethyl)-2-methoxy-	CCOCc1ccc(O)c(OC)c1		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VANILLYLETHYLETHER">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=VANILLYLETHYLETHER</a>
302	538-86-3	208-705-7	FEMA number: FEMA GRAS number: JECFA number: FL No: 03.011 CoE No: 10910	METHOXYMETHYLBENZENE; Methyl benzyl ether	COCc1ccccc1		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>
303	100-53-8	202-862-5	FEMA number: 2147 FEMA GRAS number: 3 JECFA number: 526 FL No: CoE No:	BENZYL MERCAPTAN; Phenylmethanethiol	SCc1ccccc1		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZYL MERCAPTAN">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZYL MERCAPTAN</a>

304	4410-99-5	224-563-9	FEMA number: 3894 FEMA GRAS number: 18 JECFA number: 527 FL No: CoE No:	Phenethyl mercaptan; Benzeneethanethiol	SCCc1ccccc1		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENYLETHYLMERCAPTAN2">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=PHENYLETHYLMERCAPTAN2</a>
305	539-30-0	208-714-6	FEMA number: 2144 FEMA GRAS number: 3 JECFA number: 1252 FL No: CoE No:	(Ethoxymethyl) benzene; Benzyl ethyl ether	CCOCc1ccccc1		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZYLETHYLETHER">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZYLETHYLETHER</a>
306	5925-68-8	227-656-2	FEMA number: 3857 FEMA GRAS number: 18 JECFA number: 504 FL No: CoE No:	S-Methyl benzenecarbothioate; S-Methyl thiobenzoate	CSC(=O)c1ccccc1		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLBENZOTHIOSULFIDE">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLBENZOTHIOSULFIDE</a>
307	100-68-5	202-878-2	FEMA number: 3873 FEMA GRAS number: 18 JECFA number: 459 FL No: CoE No:	Methyl phenyl sulfide; Benzene, (methylthio)-; Thioanisole	CSc1ccccc1		<a href="https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPHENYLSULFIDE">https://hfppexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLPHENYLSULFIDE</a>

308	118-72-9	204-272-3	FEMA number: 3666 FEMA GRAS number: 13 JECFA number: 530 FL No: CoE No:	2,6-dimethyl thiophenol; BENZETHI OL, 2,6- DIMETHYL-	Cc1cccc(C)c1S		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLTHIOPHENOL">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DIMETHYLTHIOPHENOL</a>
309	108-98-5	203-635-3	FEMA number: 3616 FEMA GRAS number: 12 JECFA number: 525 FL No: CoE No:	Benzenethiol; THIOPHENOL	Sc1ccccc1		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZETHIOL">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZETHIOL</a>
310	2550-40-5	219-851-6	FEMA number: 3448 FEMA GRAS number: 9, 25 JECFA number: 575 FL No: CoE No:	Cyclohexyl disulfide; Disulfide, dicyclohexyl	C1CCC(CC1)SSC1CCCC1		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DICYCLOHEXYLDISULFIDE">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=DICYCLOHEXYLDISULFIDE</a>
311	32637-94-8	696-119-6	FEMA number: FEMA GRAS number: JECFA number: FL No: 12.177 CoE No:	p-Menthan-3-one, 8-(methylthio)-, cis-; Cyclohexanone, 5-methyl-2-(1-methyl-1-(methylthio)ethyl)-, cis-	CSC(C)(C)C1CCC(C)C1=O		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>

312	57074-34-7, 94293-57-9	260-546-2	FEMA number: FEMA GRAS number: JECFA number: 506 FL No: 12.201 CoE No:	Menthone-8- thioacetate, (1R,4R)-; 8-Acetylthio-p- menthanone-3	<chem>C[C@@H]1CC[C@H](C(=O)C1)C(C)(C)SC(C)=O</chem>		<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0872</a>
313	33284-96-7, 38462-22-5	253-953-1	FEMA number: 3177 FEMA GRAS number: 4, 25 JECFA number: 561 FL No: CoE No:	p-Mentha-8- thiol-3-one	<chem>CC1CCC(C(=O)C1)C(C)(C)S</chem>		<a href="https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MEN THATHIOLONE">https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MEN THATHIOLONE</a>
314	71159-90-5	275-223-1	FEMA number: 3700 FEMA GRAS number: 13, 26 JECFA number: 523 FL No: CoE No:	1-p-Menthene- 8-thiol	<chem>CC1CCC(CC=1)C(C)(C)S</chem>		<a href="https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MEN THENETHIOL">https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=MEN THENETHIOL</a>
315	299-27-4	206-074-2	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	Gluconic acid, monopotassium salt	<chem>[K+].OC[C@@H](O)[C@@H](O)[C@H](O)[C@@H](O)C([O-])=O</chem>		<a href="https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=POTASSIUMGLUCONATE">https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=POTASSIUMGLUCONATE</a>
316	579-93-1	611-604-4	FEMA number: 4078 FEMA GRAS number: 22 JECFA number: FL No: 1552 CoE No:	N- Benzoylanthranilate; 2- benzamidobenzoate	<chem>[O-]C(=O)c1ccccc1NC(=O)c1ccccc1</chem>		<a href="https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZ OYLANTHRANILICACID">https://hfappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=BENZ OYLANTHRANILICACID</a>

317	10072-05-6		FEMA number: 4169 FEMA GRAS number: 22 JECFA number: 1551 FL No: CoE No:	Methyl 2-(dimethylamino)benzoate	<chem>COC(=O)c1ccccc1N(C)C</chem>		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLDIMETHYLANTHRANILATE">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=METHYLDIMETHYLANTHRANILATE</a>
318	38446-21-8	253-935-3	FEMA number: 4115 FEMA GRAS number: 22 JECFA number: 1547 FL No: CoE No:	Ethyl N-ethylantranilate; Diethyl anthranilate	<chem>CCNc1ccccc1C(=O)OCC</chem>		<a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLETHYLANTHRANILATE">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ETHYLETHYLANTHRANILATE</a>
319	610-16-2	210-209-0	FEMA number: FEMA GRAS number: JECFA number: FL No: CoE No:	N,N-Dimethylantranilic acid; Benzoic acid, 2-(dimethylamino)-; Anthranilic acid, N,N-dimethyl-	<chem>CN(C)c1ccccc1C(=O)O</chem>		<a href="https://foodb.ca/compounds/FDB005490">https://foodb.ca/compounds/FDB005490</a>
320	198404-98-7	4279001	FEMA number: 4776 FEMA GRAS number: JECFA number: 2254 FL No: CoE No:	Javanol	<chem>CC1(CO)CC1CC1CC2C(C2)C1(C)C</chem>		<a href="https://www.femaflavor.org/flavor-library/1-methyl-2-122-trimethylbicyclo310hex-3-ylmethylcyclopropylmethanol?utm_source=chatgpt.com">https://www.femaflavor.org/flavor-library/1-methyl-2-122-trimethylbicyclo310hex-3-ylmethylcyclopropylmethanol?utm_source=chatgpt.com</a> and <a href="https://www.fao.org/food/food-safety-quality/scientific-advice/jecfa/jecfa-flav/details/en/c/2272">https://www.fao.org/food/food-safety-quality/scientific-advice/jecfa/jecfa-flav/details/en/c/2272</a>

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321	50-81-7	2000662	FEMA number: 2109 FEMA GRAS number: 3 JECFA number: FL No: CoE No:	Ascorbic acid	OC[C@H](O)[C@H]1OC(=O)C(O)=C1O		<a href="https://foodb.ca/compounds/FDB001224">https://foodb.ca/compounds/FDB001224</a> and <a href="https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ASCO RBICACID">https://hfppappexternal.fda.gov/scripts/fdcc/index.cfm?set=FoodSubstances&amp;id=ASCO RBICACID</a>

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