

US EPA ARCHIVE DOCUMENT



Inert Ingredients Eligible for FIFRA 25(b) Pesticide Products Last Updated December 20, 2010

Provided below are the inert ingredients that are eligible for inclusion in pesticide products under the [Federal Insecticide, Fungicide, and Rodenticide Act \(FIFRA\)](#)'s [Section 25\(b\)](#). This listing of minimal risk inert ingredients updates what has been historically referred to as "4A" under [Pesticide Registration Notice 2000-6](#).

1. Commonly consumed food commodities, animal feed items, and edible fats and oils as described in [40 CFR 180.950](#)(a), (b), and (c) may be used as inert ingredients in FIFRA Section 25(b) pesticide products applied to food use sites (e.g., food crops, animals used for food) and in FIFRA Section 25(b) pesticide products applied to nonfood use sites (e.g., ornamental plants, highway right-of-ways, rodent control). Specific chemical substances listed under [40 CFR 180.950](#)(e) that are also acceptable for use as inert ingredients in FIFRA Section 25(b) pesticide products are included in the table below.

2. In addition to (1) above, the following inert ingredients are also eligible for inclusion in FIFRA Section 25(b) pesticide products. These ingredients are listed by CAS Registry Number and chemical name (common names are given, with systematic names included as synonyms in brackets where applicable). In addition, this listing has two columns to indicate whether the inert ingredient can be used in FIFRA Section 25(b) products applied to food use and/or nonfood use sites.

CAS Reg. No.	Chemical Name	Food Use ^{1/}	Nonfood Use
77-90-7	Acetyl tributyl citrate [Citric acid, 2-(acetyloxy)-, tributyl ester]	✓	✓
9002-18-0	Agar		✓
N/A	Almond hulls		✓
N/A	Almond shells		✓
10016-20-3	alpha-Cyclodextrin	✓	✓
1327-36-2	Aluminatesilicate		✓
1327-43-1	Aluminum magnesium silicate [Silicic acid, aluminum magnesium salt]		✓
12736-96-8	Aluminum potassium sodium silicate [Silicic acid, aluminum potassium sodium salt]		✓

CAS Reg. No.	Chemical Name	Food Use ^{1/}	Nonfood Use
1335-30-4	Aluminum silicate		✓
1344-00-9	Aluminum sodium silicate [Silicic acid, aluminum sodium salt]	✓	✓
12003-51-9	Aluminum sodium silicate (1:1:1) [Silicic acid (H ₄ SiO ₄), aluminum sodium salt (1:1:1)]		✓
1863-63-4	Ammonium benzoate [Benzoic acid, ammonium salt]		✓
1002-89-7	Ammonium stearate [Octadecanoic acid, ammonium salt]		✓
113894-85-2	Amylopectin, acid-hydrolyzed, 1-octenylbutanedioate	✓	✓
125109-81-1	Amylopectin, hydrogen 1-octadecenylbutanedioate	✓	✓
N/A	Animal glue	✓	✓
137-66-6	Ascorbyl palmitate		✓
12174-11-7	Attapulgate-type clay	✓	✓
8012-89-3	Beeswax	✓	✓
1302-78-9	Bentonite	✓	✓
85049-30-5	Bentonite, sodian		✓
7585-39-9	beta-Cyclodextrin	✓	✓
68409-75-6	Bone meal		✓
N/A	Bran		✓
N/A	Bread crumbs		✓
34451-19-9	(+)-Butyl lactate [Lactic acid, n-butyl ester, (S)]	✓	✓
138-22-7	Butyl lactate [Lactic acid, n-butyl ester]	✓	✓
123-95-5	Butyl stearate [Octadecanoic acid, butyl ester]	✓	✓
N/A	Calcareous shale	✓	✓
13397-26-7	Calcite (Ca(Co ₃))	✓	✓
62-54-4	Calcium acetate		✓
5743-26-0	Calcium acetate monohydrate [Acetic acid, calcium salt, monohydrate]		✓
2090-05-3	Calcium benzoate [Benzoic acid, calcium salt]		✓
471-34-1	Calcium carbonate	✓	✓
7693-13-2	Calcium citrate [Citric acid, calcium salt]	✓	✓
6107-56-8	Calcium octanoate		✓
12168-85-3	Calcium oxide silicate (Ca ₃ O(SiO ₄))		✓
1344-95-2	Calcium silicate [Silicic acid, calcium salt]	✓	✓
1592-23-0	Calcium stearate [Octadecanoic acid, calcium salt]		✓

CAS Reg. No.	Chemical Name	Food Use ^{1/}	Nonfood Use
7778-18-9	Calcium sulfate		✓
10101-41-4	Calcium sulfate dihydrate		✓
10034-76-1	Calcium sulfate hemihydrate		✓
N/A	Canary seed		✓
7440-44-0	Carbon		✓
124-38-9	Carbon dioxide		✓
9000-11-7	Carboxymethyl cellulose [Cellulose, carboxymethyl ether]	✓	✓
N/A	Cardboard		✓
8015-86-9	Carnauba wax	✓	✓
9000-40-2	Carob gum [Locust bean gum]	✓	✓
9000-07-1	Carrageenan	✓	✓
9000-71-9	Caseins		✓
8001-79-4	Castor oil	✓	✓
8001-78-3	Castor oil, hydrogenated	✓	✓
N/A	Cat food		✓
9004-34-6	Cellulose	✓	✓
9004-35-7	Cellulose acetate	✓	✓
51395-75-6	Cellulose, mixture with cellulose carboxymethyl ether, sodium salt	✓	✓
65996-61-4	Cellulose, pulp	✓	✓
68442-85-3	Cellulose, regenerated	✓	✓
N/A	Cheese		✓
479-61-8	Chlorophyll a	✓	✓
519-62-0	Chlorophyll b	✓	✓
N/A	Citrus meal	✓	✓
77-92-9	Citric acid	✓	✓
5949-29-1	Citric acid, monohydrate	✓	✓
9000-69-5	Citrus pectin		✓
68514-76-1	Citrus pulp	✓	✓
N/A	Clam shells		✓
8002-31-1	Cocoa	✓	✓
N/A	Cocoa shell flour		✓
N/A	Cocoa shells	✓	✓
8001-69-2	Cod-liver oil	✓	✓
68916-18-7	Coffee grounds	✓	✓
N/A	Cookies		✓
61789-98-8	Cork		✓
N/A	Corn cobs	✓	✓
N/A	Cotton		✓
68424-10-2	Cottonseed meal		✓
N/A	Cracked wheat		✓

CAS Reg. No.	Chemical Name	Food Use ^{1/}	Nonfood Use
26402-22-2	Decanoic acid, monoester with 1,2,3-propanetriol	✓	✓
9004-53-9	Dextrins	✓	✓
49553-76-6	Diglyceryl monooleate [9-Octadecenoic acid, ester with 1,2,3-propanetriol]		✓
12694-22-3	Diglyceryl monostearate [9-Octadecanoic acid, monoester with oxybis(propanediol)]		✓
27638-00-2	Dilaurin [Dodecanoic acid, diester with 1,2,3-propanetriol]	✓	✓
26657-95-4	Dipalmitin [Hexadecanoic acid, diester with 1,2,3-propanetriol]	✓	✓
3609-96-9	Dipotassium citrate [Citric acid, dipotassium salt]	✓	✓
144-33-2	Disodium citrate [Citric acid, disodium salt]	✓	✓
7727-73-3	Disodium sulfate decahydrate		✓
61790-53-2	Diatomaceous earth (less than 1% crystalline silica) [Kieselguhr; Diatomite]	✓	✓
27215-38-9	Dodecanoic acid, monoester with 1,2,3-propanetriol	✓	✓
16389-88-1	Dolomite	✓	✓
N/A	Douglas fir bark	✓	✓
N/A	Egg shells		✓
N/A	Eggs		✓
687-47-8	(+)-Ethyl lactate [Lactic acid, ethyl ester, (S)]	✓	✓
97-64-3	Ethyl lactate [Lactic acid, ethyl ester]	✓	✓
68476-25-5	Feldspar		✓
N/A	Fish meal		✓
8016-13-5	Fish oil (not conforming to 40 CFR 180.950)		✓
8031-18-3	Fuller's earth		✓
110-17-8	Fumaric acid	✓	✓
17465-86-0	gamma-Cyclodextrin	✓	✓
9000-70-8	Gelatins	✓	✓
71010-52-1	Gellan gum	✓	✓
68476-37-9	Glue (as depolymd. animal collagen)		✓
56-81-5	Glycerin [1,2,3-Propanetriol]	✓	✓
111-03-5	Glycerol monooleate [9-Octadecenoic acid (Z)-, 2,3-dihydroxypropyl ester]		✓
36354-80-0	Glyceryl dicaprylate [Octanoic acid, diester with 1,2,3-propanetriol]	✓	✓
53563-63-6	Glyceryl dimyristate [Tetradecanoic acid, diester with 1,2,3-propanetriol]	✓	✓

CAS Reg. No.	Chemical Name	Food Use ^{1/}	Nonfood Use
25637-84-7	Glyceryl dioleate [9-Octadecenoic acid (9Z)-, diester with 1,2,3-propanetriol]		✓
1323-83-7	Glyceryl distearate	✓	✓
27214-38-6	Glyceryl monomyristate [Tetradecanoic acid, monoester with 1,2,3-propanetriol]	✓	✓
26402-26-6	Glyceryl monooctanoate [Octanoic acid, monoester with 1,2,3-propanetriol]	✓	✓
25496-72-4	Glyceryl monooleate [9-Octadecenoic acid (9Z)-, monoester with 1,2,3-propanetriol]		✓
31566-31-1	Glyceryl monostearate [Octadecanoic acid, monoester with 1,2,3-propanetriol]	✓	✓
11099-07-3	Glyceryl stearate [Octadecanoic acid, ester with 1,2,3-propanetriol]	✓	✓
N/A	Granite	✓	✓
7782-42-5	Graphite		✓
9000-30-0	Guar gum	✓	✓
9000-01-5	Gum arabic	✓	✓
9000-65-1	Gum tragacanth	✓	✓
13397-24-5	Gypsum	✓	✓
1317-60-8	Hematite (Fe ₂ O ₃)		✓
1415-93-6	Humic acid	✓	✓
68334-00-9	Hydrogenated cottonseed oil		✓
84681-71-0	Hydrogenated rapeseed oil		✓
8016-70-4	Hydrogenated soybean oil	✓	✓
9004-62-0	Hydroxyethyl cellulose [Cellulose, 2-hydroxyethyl ether]	✓	✓
9004-64-2	Hydroxypropyl cellulose [Cellulose, 2-hydroxypropyl ether]	✓	✓
9004-65-3	Hydroxypropyl methyl cellulose [Cellulose, 2-hydroxypropyl methyl ether]	✓	✓
12068-86-9	Iron magnesium oxide (Fe ₂ MgO ₄)		✓
1309-37-1	Iron oxide (Fe ₂ O ₃)	✓	✓
12259-21-1	Iron oxide (Fe ₂ O ₃), hydrate		✓
1317-61-9	Iron oxide (Fe ₃ O ₄)		✓
1345-25-1	Iron oxide (FeO)		✓
67-63-0	Isopropyl alcohol [2-Propanol]	✓	✓
110-27-0	Isopropyl myristate	✓	✓
1332-58-7	Kaolin	✓	✓
63-42-3	Lactose	✓	✓
64044-51-5	Lactose monohydrate		✓
8006-54-0	Lanolin	✓	✓

CAS Reg. No.	Chemical Name	Food Use ^{1/}	Nonfood Use
N/A	Latex rubber		✓
143-07-7	Lauric acid	✓	✓
8002-43-5	Lecithins	✓	✓
68916-91-6	Licorice extract	✓	✓
12001-27-3	Lime (chemical) dolomitic		✓
1317-65-3	Limestone		✓
8001-26-1	Linseed oil		✓
546-93-0	Magnesium carbonate [Carbonic acid, magnesium salt (1:1)]	✓	✓
553-70-8	Magnesium benzoate		✓
1309-48-4	Magnesium oxide	✓	✓
12207-97-5	Magnesium oxide silicate (Mg ₃ O(Si ₂ O ₅) ₂), monohydrate	✓	✓
1343-88-0	Magnesium silicate	✓	✓
1343-90-4	Magnesium silicate hydrate	✓	✓
14987-04-3	Magnesium silicon oxide (Mg ₂ Si ₃ O ₈)		✓
557-04-0	Magnesium stearate [Octadecanoic acid, magnesium salt]	✓	✓
7487-88-9	Magnesium sulfate	✓	✓
10034-99-8	Magnesium sulfate heptahydrate	✓	✓
6915-15-7	Malic acid		✓
8002-48-0	Malt extract		✓
N/A	Malt flavor		✓
9050-36-6	Maltodextrin	✓	✓
9004-67-5	Methylcellulose [Cellulose, methyl ether]	✓	✓
12003-38-2	Mica	✓	✓
12001-26-2	Mica-group minerals		✓
8049-98-7	Milk		✓
N/A	Millet seed		✓
8012-95-1	Mineral oil (U.S.P.)	✓	✓
142-18-7	1-Monolaurin [Dodecanoic acid, 2,3-dihydroxypropyl ester]	✓	✓
589-68-4	1-Monomyristin [Tetradecanoic acid, 2,3-dihydroxypropyl ester]	✓	✓
53998-07-1	Monomyristin [Decanoic acid, diester with 1,2,3-propanetriol]		✓
26657-96-5	Monopalmitin [Hexadecanoic acid, monoester with 1,2,3-propanetriol]	✓	✓
866-83-1	Monopotassium citrate [Citric acid, monopotassium salt]	✓	✓
18996-35-5	Monosodium citrate [Citric acid, monosodium salt]	✓	✓
1318-93-0	Montmorillonite	✓	✓

CAS Reg. No.	Chemical Name	Food Use ^{1/}	Nonfood Use
544-63-8	Myristic acid	✓	✓
37244-96-5	Nepheline syenite		✓
7727-37-9	Nitrogen		✓
N/A	Nutria meat		✓
N/A	Nylon		✓
764-71-6	Octanoic acid, potassium salt		✓
1984-06-1	Octanoic acid, sodium salt		✓
8007-69-0	Oils, almond		✓
68917-73-7	Oils, wheat		✓
112-80-1	Oleic acid	✓	✓
N/A	Oyster shells		✓
8002-75-3	Palm oil	✓	✓
68514-74-9	Palm oil, hydrogenated		✓
57-10-3	Palmitic acid [Hexadecanoic acid]	✓	✓
N/A	Paper	✓	✓
8002-74-2	Paraffin wax		✓
N/A	Peanut butter		✓
N/A	Peanut shells		✓
N/A	Peanuts		✓
N/A	Peat moss		✓
9000-69-5	Pectin		✓
130885-09-5	Perlite		✓
93763-70-3	Perlite, expanded		✓
26499-65-0	Plaster of paris		✓
9002-88-4	Polyethylene	✓	✓
9007-48-1	Polyglyceryl oleate	✓	✓
9009-32-9	Polyglyceryl stearate	✓	✓
127-08-2	Potassium acetate [Acetic acid, potassium salt]		✓
1327-44-2	Potassium aluminum silicate, anhydrous	✓	✓
582-25-2	Potassium benzoate [Benzoic acid, potassium salt]		✓
298-14-6	Potassium bicarbonate [Carbonic acid, monopotassium salt]	✓	✓
7447-40-7	Potassium chloride	✓	✓
7778-49-6	Potassium citrate [Citric acid, potassium salt]	✓	✓
68514-28-3	Potassium humate [Humic acids, potassium salts]	✓	✓
13429-27-1	Potassium myristate [Tetradecanoic acid, potassium salt]		✓
143-18-0	Potassium oleate	✓	✓

CAS Reg. No.	Chemical Name	Food Use ^{1/}	Nonfood Use
	[9-Octadecenoic acid (9Z)-, potassium salt]		
7492-30-0	Potassium ricinoleate [9-Octadecenoic acid, 12-hydroxy-, monopotassium salt, (9Z, 12R)-]		✓
24634-61-5	Potassium sorbate [Sorbic acid, potassium salt]	✓	✓
593-29-3	Potassium stearate [Octadecanoic acid, potassium salt]	✓	✓
7778-80-5	Potassium sulfate	✓	✓
7646-93-7	Potassium sulfate [Sulfuric acid, monopotassium salt]		✓
108-32-7	1,2-Propylene carbonate [1,3-Dioxolan-2-one, 4-methyl-]	✓	✓
1332-09-8	Pumice		✓
N/A	Red cabbage color (expressed from edible red cabbage heads via a pressing process using only acidified water)	✓	✓
N/A	Red cedar chips		✓
N/A	Red dog flour		✓
9006-04-6	Rubber		✓
N/A	Sawdust		✓
N/A	Shale		✓
112945-52-5	Silica, amorphous, fumed (crystalline free)	✓	✓
7699-41-4	Silica, amorphous, precipated and gel	✓	✓
7631-86-9	Silica (crystalline free)	✓	✓
63231-67-4	Silica gel	✓	✓
112926-00-8	Silica gel, precipitated, crystalline-free	✓	✓
10279-57-9	Silica, hydrate	✓	✓
60676-86-0	Silica, vitreous	✓	✓
13776-74-4	Silicic acid (H ₂ SiO ₃), magnesium salt (1:1)	✓	✓
N/A	Soap (The water soluble sodium or potassium salts of fatty acids produced by either the saponification of fats and oils, or the neutralization of fatty acid)	✓	✓
1393-03-9	Soapbark {Quillaja saponin}	✓	✓
308076-02-0	Soapstone	✓	✓
127-09-3	Sodium acetate [Acetic acid, sodium salt]	✓	✓
9005-38-3	Sodium alginate	✓	✓
532-32-1	Sodium benzoate [Benzoic acid, sodium salt]	✓	✓
144-55-8	Sodium bicarbonate	✓	✓
9004-32-4	Sodium carboxymethyl cellulose [Cellulose, carboxymethyl ether, sodium salt]	✓	✓

CAS Reg. No.	Chemical Name	Food Use ^{1/}	Nonfood Use
7647-14-5	Sodium chloride	✓	✓
994-36-5	Sodium citrate	✓	✓
68131-04-4	Sodium humate [Humic acids, sodium salts]	✓	✓
143-19-1	Sodium oleate		✓
5323-95-5	Sodium ricinoleate [9-Octadecenoic acid, 12-hydroxy-, monosodium salt, (9Z,12R)-]		✓
822-16-2	Sodium stearate [Octadecanoic acid, sodium salt]	✓	✓
7757-82-6	Sodium sulfate	✓	✓
50-70-4	Sorbitol [D-glucitol]	✓	✓
N/A	Soy protein		✓
8030-76-0	Soya lecithins [Lecithins, soya]	✓	✓
N/A	Soybean hulls		✓
68308-36-1	Soybean meal		✓
68513-95-1	Soybean, flour		✓
57-11-4	Stearic acid [Octadecanoic acid]	✓	✓
7704-34-9	Sulfur		✓
68425-17-2	Syrups, hydrolyzed starch, hydrogenated	✓	✓
71012-10-7	Tetraglyceryl monooleate [9-Octadecenoic acid (9Z)-, monoester with tetraglycerol]		✓
813-94-5	Tricalcium citrate [Citric acid, calcium salt (2:3)]	✓	✓
77-93-0	Triethyl citrate [Citric acid, triethyl ester]	✓	✓
866-84-2	Tripotassium citrate [Citric acid, tripotassium salt]	✓	✓
6100-05-6	Tripotassium citrate monohydrate [Citric acid, tripotassium salt, monohydrate]	✓	✓
68-04-2	Trisodium citrate [Citric acid, trisodium salt]	✓	✓
6132-04-3	Trisodium citrate dehydrate [Citric acid, trisodium salt, dehydrate]	✓	✓
6858-44-2	Trisodium citrate pentahydrate [Citric acid, trisodium salt, pentahydrate]	✓	✓
57455-37-5	Ultramarine blue [C.I. Pigment Blue 29]	✓	✓
57-13-6	Urea	✓	✓
121-33-5	Vanillin [Benzaldehyde, 4-hydroxy-3-methoxy-]	✓	✓

CAS Reg. No.	Chemical Name	Food Use ^{1/}	Nonfood Use
1318-00-9	Vermiculite	✓	✓
8028-52-2	Vinegar (maximum 8% acetic acid in solution)	✓	✓
50-81-7	Vitamin C [L-Ascorbic acid]	✓	✓
1406-18-4	Vitamin E	✓	✓
N/A	Walnut flour		✓
N/A	Walnut shells		✓
N/A	Wheat		✓
N/A	Wheat flour		✓
8006-95-9	Wheat germ oil		✓
92129-90-3	Whey		✓
8042-47-5	White mineral oil (petroleum)	✓	✓
68917-75-9	Wintergreen oil		✓
13983-17-0	Wollastonite (Ca(SiO ₃))		✓
N/A	Wool		✓
11138-66-2	Xanthan gum	✓	✓
68876-77-7	Yeast		✓
1318-02-1	Zeolites (excluding erionite (CAS Reg. No. 66733-21-9))	✓	✓
68989-22-0	Zeolites, NaA		✓
12063-19-3	Zinc iron oxide		✓
1314-13-2	Zinc oxide (ZnO)	✓	✓
557-05-1	Zinc stearate [Octadecanoic acid, zinc salt]	✓	✓

1/ Inert ingredients eligible for FIFRA 25(b) pesticide products having tolerance exemptions under one or more of the following sections of 40 CFR Part 180: 910; 920, 930, 950(a), 950(b), 950(c), 950(e), 960

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