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# Minimum Risk Pesticide: Definition and Product Confirmation

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## What is a minimum risk pesticide?

Because EPA has determined that certain "minimum risk pesticides" pose little to no risk to human health or the environment, EPA has exempted them from the requirement that they be registered under the Federal Insecticide, Fungicide, and Rodenticide Act. [This exemption provision is located in 40 CFR 152.25\(f\).](#)

Pesticides are used to control various pests, such as mosquitoes, ticks, rats and mice. Pesticides are also used in agriculture to control weeds, insect infestation and diseases. [There are many different types of pesticides; each is meant to be effective against specific pests.](#)

Starting in 1996, we exempted such products to reduce the cost and regulatory burdens on businesses and the public for pesticides posing little or no risk, and to focus our resources on pesticides that pose greater risk to humans and the environment.

- Learn about [minimum risk pesticide criteria](#).
- View lists of [active ingredients](#) and [inert ingredients](#) allowed in minimum risk pesticides.

## Will EPA confirm that my product is a minimum risk pesticide?

Generally, we do not review products that claim to meet the criteria set by 40 CFR 152.25(f) for exemption from pesticide regulation for companies planning to market such a product. We also do not provide a label review of such products. The producer is responsible to carefully read the criteria and make an evaluation of how the product meets (or does not meet) the criteria.

If a product does not meet all of the exemption criteria, the product is not exempt from FIFRA regulation under 40 CFR 152.25(f), and sale or distribution of the product without registration may be a violation of FIFRA unless it is otherwise exempt from registration requirements. In these cases, the producer should contact EPA to seek a registration for the product. For the possible consequences of a violation of FIFRA, refer to the section on [Enforcement Related to Minimum Risk Pesticides](#).

## For More Information

We can answer questions, or provide additional information. [Contact EPA about minimum risk pesticides.](#)

### Disclaimer about Minimum Risk Pesticide Web Content

These Web pages provide guidance to persons who are interested in manufacturing, selling or distributing minimum risk pesticides under 40 CFR 152.25(f). This guidance does not create any binding requirements, although it refers to existing statutory and regulatory requirements and guidance. [More...](#)

LAST UPDATED ON APRIL 2, 2018

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# Conditions for Minimum Risk Pesticides

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A minimum risk product must meet the six conditions listed below. A product that meets all of these six conditions then is exempted from regulation under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), i.e., the pesticide product does not need to be registered with EPA. However, [states may require registration under state laws](#).

For further information see [40 CFR 152.25\(f\)](#).

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## Overview

- **Condition 1:** The product's active ingredients must only be those that are listed in 40 CFR 152.25(f)(1).
- **Condition 2:** The product's inert ingredients may only be those that have been classified by EPA as:
  - Listed in 40 CFR 152.25(f)(2)
  - commonly consumed food commodities, animal feed items, and edible fats and oils as described in 40 CFR 180.950(a), (b), and (c); and
  - certain chemical substances listed under 40 CFR 180.950(e).

- **Condition 3:** All of the ingredients (both active and inert) must be listed on the label. The active ingredient(s) must be listed by label display name and percentage by weight. Each inert ingredient must be listed by label display name.
- **Condition 4:** The product must not bear claims either to control or mitigate organisms that pose a threat to human health, or insects or rodents carrying specific diseases.
- **Condition 5:** The name of the producer or the company for whom the product was produced and the company's contact information must be displayed prominently on the product label.
- **Condition 6:** The label cannot include any false or misleading statements.

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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

### Active Ingredients Eligible for Minimum Risk Pesticide Products (Updated December 2015)

Provided below is the list of active ingredients that can be used in pesticide products that are exempt from the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) under the Minimum Risk Exemption regulations in 40 CFR 152.25(f).

**How to Use this List:** The list contains all the eligible active ingredients under 40 CFR 152.25(f)(1). Identify whether your active ingredient is eligible by comparing your ingredient with the label display name and chemical name, and that the Chemical Abstracts Service (CAS) number matches the ingredient you intend to use. Additionally, ensure that your ingredient meets any specifications listed. Any eligible ingredient used must be listed on your product's label using the prescribed label display name.

All listed active ingredients may be used in non-food use products. Under section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA) and EPA implementing regulations at 40 CFR 180, products intended for use on food-use sites (e.g., used on food, food crops, food contact surfaces, or animal feed commodities) can only include active ingredients with applicable tolerances or tolerance exemptions in 40 CFR 180. Before labeling a minimum risk pesticide product for a food use, verify that the use you are labeling has been approved for each ingredient used in the product in 40 CFR 180.

Label Display Name	Chemical Name	CAS No.	Specifications	Nonfood Use	Food Use
Castor oil	Castor oil	8001-79-4	United States Pharmacopeia (U.S.P.) or equivalent	✓	✓
Cedarwood oil	Cedarwood oil (China)	85085-29-6	---	✓	
Cedarwood oil	Cedarwood oil (Texas)	68990-83-0	---	✓	
Cedarwood oil	Cedarwood oil (Virginia)	8000-27-9	---	✓	
Cinnamon	Cinnamon	N/A	---	✓	✓
Cinnamon oil	Cinnamon oil	8015-91-6	---	✓	✓
Citric acid	2-Hydroxypropane-1,2,3-tricarboxylic acid	77-92-9	---	✓	✓
Citronella	Citronella	N/A	---	✓	
Citronella oil	Citronella oil	8000-29-1	---	✓	
Cloves	Cloves	N/A	---	✓	✓
Clove oil	Clove oil	8000-34-8	---	✓	✓

Label Display Name	Chemical Name	CAS No.	Specifications	Nonfood Use	Food Use
Corn gluten meal	Corn gluten meal	66071-96-3	---	✓	✓
Corn oil	Corn oil	8001-30-7	---	✓	✓
Cornmint	Cornmint	N/A	---	✓	✓
Cornmint oil	Cornmint oil	68917-18-0	---	✓	✓
Cottonseed oil	Cottonseed oil	8001-29-4	---	✓	✓
Dried blood	Dried blood	68911-49-9	---	✓	
Eugenol	4-Allyl-2-methoxyphenol	97-53-0	---	✓	
Garlic	Garlic	N/A	---	✓	✓
Garlic oil	Garlic oil	8000-78-0	---	✓	✓
Geraniol	(2E)-3,7-Dimethylocta-2,6-dien-1-ol	106-24-1	---	✓	✓
Geranium oil	Geranium oil	8000-46-2	---	✓	
Lauryl sulfate	Lauryl sulfate	151-41-7	---	✓	✓
Lemongrass oil	Lemongrass oil	8007-02-1	---	✓	
Linseed oil	Linseed oil	8001-26-1	---	✓	✓
Malic acid	2-Hydroxybutanedioic acid	6915-15-7	---	✓	
Peppermint	Peppermint	N/A	---	✓	✓
Peppermint oil	Peppermint oil	8006-90-4	---	✓	✓
2-Phenylethyl propionate	2-Phenylethyl propionate	122-70-3	---	✓	
Potassium sorbate	Potassium (2E,4E)-hexa-2,4-dienoate	24634-61-5	---	✓	✓
Putrescent whole egg solids	Putrescent whole egg solids	51609-52-0	---	✓	✓
Rosemary	Rosemary	N/A	---	✓	✓
Rosemary oil	Rosemary oil	8000-25-7	---	✓	✓
Sesame	Sesame	N/A	Includes ground sesame plant	✓	✓
Sesame oil	Sesame oil	8008-74-0	---	✓	✓
Sodium chloride	Sodium chloride	7647-14-5	---	✓	✓
Sodium lauryl sulfate	Sulfuric acid monododecyl ester, sodium salt	151-21-3	---	✓	✓
Soybean oil	Soybean oil	8001-22-7	---	✓	✓
Spearmint	Spearmint	N/A	---	✓	✓
Spearmint oil	Spearmint oil	8008-79-5	---	✓	✓
Thyme	Thyme	N/A	---	✓	✓
Thyme oil	Thyme oil	8007-46-3	---	✓	✓
White pepper	White pepper	N/A	---	✓	✓
Zinc	Zinc	7440-66-6	Zinc metal strips (consisting solely of zinc metal and impurities)	✓	

If the tolerance exemption appears in.....	Then the inert ingredient may be included in a minimum risk product that is applied to:
40 CFR180.910	Growing crops or raw agricultural commodities after harvest.
40 CFR 180.920	Growing crops
40 CFR 180.930	Animals
40 CFR 180.940(a)	Food-contact surfaces in public eating places, dairy- processing equipment, and food-processing equipment and utensils
40 CFR 180.940(b)	Dairy-processing equipment, and food-processing equipment and utensils
40 CFR 180.940(c)	Food-processing equipment and utensils
40 CFR 180.950	Any food-use site
40 CFR 180.960	Any food-use site
40 CFR 180.1071	One of the 14 specified use patterns appropriate for peanuts, tree nuts, milk, soybeans, eggs, fish, crustacea, and wheat..
40 CFR 180.1087	Residues of the biorational nematicide sesame stalk in or on the raw agricultural commodities identified in the tolerance exemption.
40 CFR 180.1233	Potassium sorbate exemption from the requirement of a tolerance
40 CFR 180.1251	Geraniol exemption from the requirement of a tolerance



## Inert Ingredients Eligible for FIFRA 25(b) Pesticide Products (Revised November 2016)

Provided below are the inert ingredients that can be used in pesticide products that are exempt from Federal regulation under the Minimum Risk Exemption regulations in 40 CFR 152.25(f).

How to Use this List: To determine if an inert ingredient can be used in minimum risk pesticide products, locate the ingredient in the table below by using the CAS Reg. No. or the chemical name. Once the ingredient has been located, go to the last three columns. All inert ingredients identified below can be used on non-food use sites (e.g., ornamental plants, highway right-of-ways, rodent control). If the inert ingredient can be used in minimum risk pesticides applied to food-use sites (i.e., used on food, food crops, food contact surfaces, or animal feed commodities), there will be a checkmark in the food-use column. When a manufacturer intends to label their minimum risk pesticide product for a food-use, the tolerance exemption citation (third column) provides information on the appropriate food-use sites for a particular chemical substance. This information must be consulted to ensure that each of the ingredients used in the product meet the 40 CFR part 180 requirements for the particular food-use site(s) on that product label.

If the inert ingredient is NOT specifically listed in the table below, then it cannot be used as an inert ingredient in a minimum risk product, UNLESS:

The ingredient is described as a commonly consumed food commodity, animal feed item, or edible fat and oil as specified in 40 CFR 180.950(a), (b), or (c), respectively. Any substance meeting the criteria described in 40 CFR 180.950(a), (b), or (c) may be used as an inert ingredient in any minimum risk pesticide product applied to food-use sites and/or nonfood use sites.

EPA also notes that the specific chemical substances listed under 40 CFR 180.950(e) that are also acceptable for use as inert ingredients in minimum risk pesticide products are duplicated in the following table.

Label Display Name	Chemical Name	CAS No.	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx <sup>1,2</sup>
Acetyl tributyl citrate	Citric acid, 2-(acetoxy)-, tributyl ester	77-90-7	✓	✓	950(e)
Agar	Agar	9002-18-0	✓		
Almond hulls	Almond hulls	N/A	✓	✓	950(b)
Almond oil	Oils, almond	8007-69-0	✓		
Almond shells	Almond shells	N/A	✓	✓	950(b)

Label Display Name	Chemical Name	CAS No.	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx <sup>1,2</sup>
alpha-Cyclodextrin	alpha-Cyclodextrin	10016-20-3	✓	✓	950(e)
Aluminatesilicate	Aluminatesilicate	1327-36-2	✓		
Aluminum magnesium silicate	Silicic acid, aluminum magnesium salt	1327-43-1	✓		
Aluminum potassium sodium silicate	Silicic acid, aluminum potassium	12736-96-8	✓		
Aluminum silicate	Aluminum silicate	1335-30-4	✓		
Aluminum sodium silicate	Silicic acid, aluminum sodium salt	1344-00-9	✓	✓	910
Aluminum sodium silicate	Silicic acid (H <sub>4</sub> SiO <sub>4</sub> ), aluminum sodium salt (1:1:1)	12003-51-9	✓		
Ammonium benzoate	Benzoic acid, ammonium salt	1863-63-4	✓		
Ammonium stearate	Octadecanoic acid, ammonium salt	1002-89-7	✓	✓	910
Amylopectin, acid- hydrolyzed, 1- octenylbutanedioate	Amylopectin, acid- hydrolyzed, 1- octenylbutanedioate	113894-85-2	✓	✓	950(e)
Amylopectin, hydrogen 1- octadecenylbutanedioate	Amylopectin, hydrogen 1- octadecenylbutanedioate	125109-81-1	✓	✓	950(e)
Animal glue	Animal glue	N/A	✓	✓	950(e)
Ascorbyl palmitate	Ascorbyl palmitate	137-66-6	✓	✓	910, 930
Attapulgite-type clay	Attapulgite-type clay	12174-11-7	✓	✓	910, 930
Beeswax	Beeswax	8012-89-3	✓	✓	950(e)
Bentonite	Bentonite	1302-78-9	✓	✓	910
Bentonite, sodian	Bentonite, sodian	85049-30-5	✓		
beta-Cyclodextrin	beta-Cyclodextrin	7585-39-9	✓	✓	950(e)
Bone meal	Bone meal	68409-75-6	✓		
Bran	Bran	N/A	✓	✓	1071
Bread crumbs	Bread crumbs	N/A	✓	✓	1071
(+)-Butyl lactate	Lactic acid, n-butyl ester, (S)	34451-19-9	✓	✓	950(e)
Butyl lactate	Lactic acid, n-butyl ester	138-22-7	✓	✓	950(e)
Butyl stearate	Octadecanoic acid, butyl ester	123-95-5	✓	✓	950(e)
Calcareous shale	Calcareous shale	N/A	✓	✓	910
Calcite	Calcite (Ca(CO <sub>3</sub> ))	13397-26-7	✓	✓	910, 930
Calcium acetate	Calcium acetate	62-54-4	✓		
Calcium acetate monohydrate	Acetic acid, calcium salt, monohydrate	5743-26-0	✓		

Label Display Name	Chemical Name	CAS No.	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx <sup>1,2</sup>
Calcium benzoate	Benzoic acid, calcium salt	2090-05-3	✓		
Calcium carbonate	Calcium carbonate	471-34-1	✓	✓	910, 930
Calcium citrate	Citric acid, calcium salt	7693-13-2	✓	✓	950(e)
Calcium octanoate	Calcium octanoate	6107-56-8	✓	✓	910
Calcium oxide silicate	Calcium oxide silicate (Ca <sub>3</sub> O(SiO <sub>4</sub> ))	12168-85-3	✓		
Calcium silicate	Silicic acid, calcium salt	1344-95-2	✓	✓	910, 930
Calcium stearate	Octadecanoic acid, calcium salt	1592-23-0	✓	✓	910, 930, 940(a), 940(c)
Calcium sulfate	Calcium sulfate	7778-18-9	✓		
Calcium sulfate dihydrate	Calcium sulfate dihydrate	10101-41-4	✓		
Calcium sulfate hemihydrate	Calcium sulfate hemihydrate	10034-76-1	✓		
Canary seed	Canary seed	N/A	✓	✓	950(b)
Carbon	Carbon	7440-44-0	✓		
Carbon dioxide	Carbon dioxide	124-38-9	✓	✓	910, 930
Carboxymethyl cellulose	Cellulose, carboxymethyl ether	9000-11-7	✓		
Cardboard	Cardboard	N/A	✓	✓	950(e)
Carnauba wax	Carnauba wax	8015-86-9	✓	✓	950(e)
Carob gum	Locust bean gum	9000-40-2	✓	✓	950(e)
Carrageenan	Carrageenan	9000-07-1	✓	✓	910, 920, 930
Caseins	Caseins	9000-71-9	✓		
Castor oil	Castor oil	8001-79-4	✓	✓	950(e)
Castor oil, hydrogenated	Castor oil, hydrogenated	8001-78-3	✓	✓	950(e)
Cat food	Cat food	N/A	✓		
Cellulose	Cellulose	9004-34-6	✓	✓	950(e)
Cellulose acetate	Cellulose acetate	9004-35-7	✓	✓	950(e)
Cellulose, mixture with cellulose carboxymethyl ether, sodium salt	Cellulose, mixture with cellulose carboxymethyl ether, sodium salt	51395-75-6	✓	✓	950(e)
Cellulose, pulp	Cellulose, pulp	65996-61-4	✓	✓	950(e)
Cellulose, regenerated	Cellulose, regenerated	68442-85-3	✓	✓	950(e)
Cheese	Cheese	N/A	✓	✓	950(a) or 1071
Chlorophyll a	Chlorophyll a	479-61-8	✓		
Chlorophyll b	Chlorophyll b	519-62-0	✓		
Citric acid	Citric acid	77-92-9	✓	✓	950(e)
Citric acid, monohydrate	Citric acid, monohydrate	5949-29-1	✓	✓	950(e)
Citrus meal	Citrus meal	N/A	✓	✓	950
Citrus pectin	Citrus pectin	9000-69-5	✓		
Citrus pulp	Citrus pulp	68514-76-1	✓	✓	950(b)
Clam shells	Clam shells	N/A	✓		
Cocoa	Cocoa	8002-31-1	✓	✓	950(a)

Label Display Name	Chemical Name	CAS No.	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx <sup>1,2</sup>
Cocoa shell flour	Cocoa shell flour	N/A	✓		
Cocoa shells	Cocoa shells	N/A	✓	✓	950(b)
Cod-liver oil	Cod-liver oil	8001-69-2	✓	✓	910
Coffee grounds	Coffee grounds	68916-18-7	✓	✓	950(e)
Cookies	Cookies	N/A	✓	✓	950 or 1071
Cork	Cork	61789-98-8	✓		
Corn cobs	Corn cobs	N/A	✓	✓	950(b)
Cotton	Cotton	N/A	✓		
Cottonseed meal	Cottonseed meal	68424-10-2	✓		
Cracked wheat	Cracked wheat	N/A	✓	✓	1071
Decanoic acid, monoester with 1,2,3- propanetriol	Decanoic acid, monoester with 1,2,3- propanetriol	26402-22-2	✓	✓	910
Dextrins	Dextrins	9004-53-9	✓	✓	950(e)
Diglyceryl monooleate	9-Octadecenoic acid, ester with 1,2,3- propanetriol	49553-76-6	✓	✓	910
Diglyceryl monostearate	9-Octadecanoic acid, monoester with oxybis(propanediol)	12694-22-3	✓	✓	910
Dilaurin	Dodecanoic acid, diester with 1,2,3- propanetriol	27638-00-2	✓	✓	910
Dipalmitin	Hexadecanoic acid, diester with 1,2,3- propanetriol	26657-95-4	✓	✓	910
Dipotassium citrate	Citric acid, dipotassium salt	3609-96-9	✓	✓	950(e)
Disodium citrate	Citric acid, disodium salt	144-33-2	✓	✓	950(e)
Disodium sulfate	Disodium sulfate decahydrate	7727-73-3	✓		
Diatomaceous earth	Kieselguhr; Diatomite (less than 1% crystalline silica)	61790-53-2	✓	✓	910, 930, 1017
Dodecanoic acid, monoester with 1,2,3- propanetriol	Dodecanoic acid, monoester with 1,2,3- propanetriol	27215-38-9	✓	✓	910
Dolomite	Dolomite	16389-88-1	✓	✓	910
Douglas fir bark	Douglas fir bark	N/A	✓	✓	920
Egg shells	Egg shells	N/A	✓		
Eggs	Eggs	N/A	✓	✓	1071
(+)-Ethyl lactate	Lactic acid, ethyl ester, (S)	687-47-8	✓	✓	950(e)
Ethyl lactate	Lactic acid, ethyl ester	97-64-3	✓	✓	950(e)
Feldspar	Feldspar	68476-25-5	✓		
Ferric oxide	Iron oxide (Fe <sub>2</sub> O <sub>3</sub> )	1309-37-1	✓	✓	910, 930
Ferrous oxide	Iron oxide (FeO)	1345-25-1	✓	✓	950(b)
Fish meal	Fish meal	N/A	✓	✓	1071
Fish oil	Fish oil	8016-13-5	✓		
Fuller's earth	Fuller's earth	8031-18-3	✓	✓	910
Fumaric acid	Fumaric acid	110-17-8	✓	✓	950(e)

Label Display Name	Chemical Name	CAS No.	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx <sup>1,2</sup>
gamma-Cyclodextrin	gamma-Cyclodextrin	17465-86-0	✓	✓	950(e)
Gelatins	Gelatins	9000-70-8	✓	✓	950(a)
Gellan gum	Gellan gum	71010-52-1	✓	✓	950(e)
Glue	Glue (as depolymd. animal collagen)	68476-37-9	✓		
Glycerin	1,2,3-Propanetriol	56-81-5	✓	✓	950(e)
Glycerol monooleate	9-Octadecenoic acid (Z)-, 2,3-dihydroxypropyl ester	111-03-5	✓	✓	910
Glyceryl dicaprylate	Octanoic acid, diester with 1,2,3-propanetriol	36354-80-0	✓	✓	910
Glyceryl dimyristate	Tetradecanoic acid, diester with 1,2,3- propanetriol	53563-63-6	✓	✓	910
Glyceryl dioleate	9-Octadecenoic acid (9Z)-, diester with 1,2,3-propanetriol	25637-84-7	✓	✓	910
Glyceryl distearate	Octadecanoic acid, diester with 1,2,3- propanetriol	1323-83-7	✓	✓	910
Glyceryl monomyristate	Tetradecanoic acid, monoester with 1,2,3-propanetriol	27214-38-6	✓	✓	910
Glyceryl monooctanoate	Octanoic acid, monoester with 1,2,3- propanetriol	26402-26-6	✓	✓	910
Glyceryl monooleate	9-Octadecenoic acid (9Z)-, monoester with 1,2,3-propanetriol	25496-72-4	✓	✓	910, 930
Glyceryl monostearate	Octadecanoic acid, monoester with 1,2,3-propanetriol	31566-31-1	✓	✓	910, 930
Glyceryl stearate	Octadecanoic acid, ester with 1,2,3- propanetriol	11099-07-3	✓	✓	910
Granite	Granite	N/A	✓	✓	910
Graphite	Graphite	7782-42-5	✓	✓	910
Guar gum	Guar gum	9000-30-0	✓	✓	950(e)
Gum Arabic	Gum arabic	9000-01-5	✓	✓	910
Gum tragacanth	Gum tragacanth	9000-65-1	✓		
Gypsum	Gypsum	13397-24-5	✓	✓	910, 930
Hematite	Hematite (Fe <sub>2</sub> O <sub>3</sub> )	1317-60-8	✓		
Humic acid	Humic acid	1415-93-6	✓	✓	950(e)
Hydrogenated	Hydrogenated cottonseed oil	68334-00-9	✓	✓	950(c)
Hydrogenated rapeseed	Hydrogenated rapeseed oil	84681-71-0	✓	✓	950(c)
Hydrogenated soybean	Hydrogenated soybean oil	8016-70-4	✓	✓	950(c)
Hydroxyethyl cellulose	Cellulose, 2-hydroxyethyl ether	9004-62-0	✓	✓	950(e)
Hydroxypropyl cellulose	Cellulose, 2-hydroxypropyl ether	9004-64-2	✓	✓	950(e)
Hydroxypropyl methyl cellulose	Cellulose, 2-hydroxypropyl methyl ether	9004-65-3	✓	✓	950(e)

Label Display Name	Chemical Name	CAS No.	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx <sup>1,2</sup>
Iron magnesium oxide	Iron magnesium oxide (Fe <sub>2</sub> MgO <sub>4</sub> )	12068-86-9	✓		
Iron oxide, hydrate	Iron oxide (Fe <sub>2</sub> O <sub>3</sub> ), hydrate	12259-21-1	✓	✓	910
Iron oxide	Iron oxide (Fe <sub>3</sub> O <sub>4</sub> )	1317-61-9	✓	✓	910
Isopropyl alcohol	2-Propanol	67-63-0	✓	✓	950(e)
Isopropyl myristate	Isopropyl myristate	110-27-0	✓	✓	910, 930
Kaolin	Kaolin	1332-58-7	✓	✓	910, 930, 1180
Lactose	Lactose	63-42-3	✓	✓	950(a)
Lactose monohydrate	Lactose monohydrate	64044-51-5	✓	✓	950(a)
Lanolin	Lanolin	8006-54-0	✓	✓	950(e)
Latex rubber	Latex rubber	N/A	✓		
Lauric acid	Lauric acid	143-07-7	✓	✓	950(e)
Lecithins	Lecithins	8002-43-5	✓	✓	950(e)
Licorice extract	Licorice extract	68916-91-6	✓	✓	950(e)
Lime dolomitic	Lime (chemical) dolomitic	12001-27-3	✓	✓	910
Limestone	Limestone	1317-65-3	✓	✓	910, 930
Linseed oil	Linseed oil	8001-26-1	✓	✓	950(c)
Magnesium carbonate	Carbonic acid, magnesium salt (1:1)	546-93-0	✓	✓	910, 930
Magnesium benzoate	Magnesium benzoate	553-70-8	✓		
Magnesium oxide	Magnesium oxide	1309-48-4	✓	✓	910, 940a, 940c
Magnesium oxide silicate	Magnesium oxide silicate	12207-97-5	✓	✓	9
Magnesium silicate	Magnesium silicate	1343-88-0	✓	✓	910
Magnesium silicate hydrate	Magnesium silicate hydrate	1343-90-4	✓	✓	910, 930
Magnesium silicon	Magnesium silicon oxide	14987-04-3	✓	✓	
Magnesium stearate	Octadecanoic acid, magnesium salt	557-04-0	✓	✓	910
Magnesium sulfate	Magnesium sulfate	7487-88-9	✓	✓	910
Magnesium sulfate heptahydrate	Magnesium sulfate heptahydrate	10034-99-8	✓	✓	910
Malic acid	Malic acid	6915-15-7	✓		
Malt extract	Malt extract	8002-48-0	✓	✓	950(a)
Malt flavor	Malt flavor	N/A	✓	✓	950(a)
Maltodextrin	Maltodextrin	9050-36-6	✓	✓	950(e)
Methylcellulose	Cellulose, methyl ether	9004-67-5	✓	✓	950(e)
Mica	Mica	12003-38-2	✓	✓	910
Mica-group minerals	Mica-group minerals	12001-26-2	✓		
Milk	Milk	8049-98-7	✓	✓	1071
Millet seed	Millet seed	N/A	✓	✓	950(a)
Mineral oil	Mineral oil (U.S.P.)	8012-95-1	✓	✓	910, 930

Label Display Name	Chemical Name	CAS No.	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx <sup>1,2</sup>
1-Monolaurin	Dodecanoic acid, 2,3-dihydroxypropyl ester	142-18-7	✓	✓	910
1-Monomyristin	Tetradecanoic acid, 2,3-dihydroxypropyl ester	589-68-4	✓	✓	910
Monomyristin	Decanoic acid, diester with 1,2,3-propanetriol	53998-07-1	✓		
Monopalmitin	Hexadecanoic acid, monoester with 1,2,3-propanetriol	26657-96-5	✓	✓	910
Monopotassium citrate	Citric acid, monopotassium salt	866-83-1	✓	✓	950(e)
Monosodium citrate	Citric acid, monosodium salt	18996-35-5	✓	✓	950(e)
Montmorillonite	Montmorillonite	1318-93-0	✓	✓	910, 930
Myristic acid	Myristic acid	544-63-8	✓	✓	910
Nepheline syenite	Nepheline syenite	37244-96-5	✓		
Nitrogen	Nitrogen	7727-37-9	✓		
Nutria meat	Nutria meat	N/A	✓		
Nylon	Nylon	N/A	✓		
Octanoic acid, potassium salt	Octanoic acid, potassium salt	764-71-6	✓	✓	910
Octanoic acid, sodium salt	Octanoic acid, sodium salt	1984-06-1	✓	✓	910
Oleic acid	Oleic acid	112-80-1	✓	✓	910, 930
Oyster shells	Oyster shells	N/A	✓		
Palm oil	Palm oil	8002-75-3	✓	✓	950(c)
Palm oil, hydrogenated	Palm oil, hydrogenated	68514-74-9	✓	✓	950(c)
Palmitic acid	Hexadecanoic acid	57-10-3	✓	✓	910
Paper	Paper	N/A	✓	✓	950(e)
Paraffin wax	Paraffin wax	8002-74-2	✓		
Peanut butter	Peanut butter	N/A	✓	✓	1071
Peanut shells	Peanut shells	N/A	✓	✓	950(b)
Peanuts	Peanuts	N/A	✓	✓	1071
Peat moss	Peat moss	N/A	✓		
Pectin	Pectin	9000-69-5	✓		
Perlite	Perlite	130885-09-5	✓		
Perlite, expanded	Perlite, expanded	93763-70-3	✓		
Plaster of paris	Plaster of paris	26499-65-0	✓		
Polyethylene	Polyethylene	9002-88-4	✓	✓	910, 930
Polyglyceryl oleate	Polyglyceryl oleate	9007-48-1	✓	✓	910
Polyglyceryl stearate	Polyglyceryl stearate	9009-32-9	✓	✓	910, 930
Potassium acetate	Acetic acid, potassium salt	127-08-2	✓		
Potassium aluminum silicate, anhydrous	Potassium aluminum silicate, anhydrous	1327-44-2	✓	✓	910
Potassium benzoate	Benzoic acid, potassium salt	582-25-2	✓		

Label Display Name	Chemical Name	CAS No.	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx <sup>1,2</sup>
Potassium bicarbonate	Carbonic acid, monopotassium salt	298-14-6	✓	✓	950(e)
Potassium chloride	Potassium chloride	7447-40-7	✓	✓	950(e)
Potassium citrate	Citric acid, potassium salt	7778-49-6	✓	✓	950(e)
Potassium humate	Humic acids, potassium salts	68514-28-3	✓	✓	950(e)
Potassium myristate	Tetradecanoic acid, potassium salt	13429-27-1	✓	✓	910
Potassium oleate	9-Octadecenoic acid (9Z)-, potassium	143-18-0	✓	✓	910
Potassium ricinoleate	9-Octadecenoic acid, 12-hydroxy-, monopotassium salt, (9Z, 12R)-	7492-30-0	✓		
Potassium sorbate	Sorbic acid, potassium salt	24634-61-5	✓	✓	950(e)
Potassium stearate	Octadecanoic acid, potassium salt	593-29-3	✓	✓	1068
Potassium sulfate	Potassium sulfate	7778-80-5	✓	✓	910
Potassium sulfate	Sulfuric acid, monopotassium salt	7646-93-7	✓		
1,2-Propylene carbonate	1,3-Dioxolan-2-one, 4-methyl-	108-32-7	✓	✓	950(e)
Pumice	Pumice	1332-09-8	✓		
Red cabbage color	Red cabbage color (expressed from edible red cabbage heads via a pressing process using only acidified water)	N/A	✓	✓	950(e)
Red cedar chips	Red cedar chips	N/A	✓		
Red dog flour	Red dog flour	N/A	✓		
Rubber	Rubber	9006-04-6	✓		
Sawdust	Sawdust	N/A	✓		
Shale	Shale	N/A	✓		
Silica, amorphous, fumed	Silica, amorphous, fumed (crystalline free)	112945-52-5	✓	✓	950(e)
Silica, amorphous, precipitate and gel	Silica, amorphous, precipitate and gel	7699-41-4	✓	✓	950(e)
Silica	Silica (crystalline free)	7631-86-9	✓	✓	
Silica gel	Silica gel	63231-67-4	✓	✓	950(e)
Silica gel, precipitated, crystalline-free	Silica gel, precipitated, crystalline-free	112926-00-8	✓	✓	950(e)
Silica, hydrate	Silica, hydrate	10279-57-9	✓	✓	950(e)
Silica, vitreous	Silica, vitreous	60676-86-0	✓	✓	950(e)
Silicic acid, magnesium salt	Silicic acid (H <sub>2</sub> SiO <sub>3</sub> ), magnesium salt	13776-74-4	✓	✓	910, 930
Soap	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)	N/A	✓	✓	950(e)

Label Display Name	Chemical Name	CAS No.	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx <sup>1,2</sup>
Soapbark	Quillaja saponin	1393-03-9	✓	✓	950(e)
Soapstone	Soapstone	308076-02-0	✓	✓	910, 930
Sodium acetate	Acetic acid, sodium salt	127-09-3	✓	✓	950(e)
Sodium alginate	Sodium alginate	9005-38-3	✓	✓	950(e)
Sodium benzoate	Benzoic acid, sodium salt	532-32-1	✓	✓	950(e)
Sodium bicarbonate	Sodium bicarbonate	144-55-8	✓	✓	950(e)
Sodium carboxymethyl cellulose	Cellulose, carboxymethyl ether, sodium	9004-32-4	✓	✓	950(e)
Sodium chloride	Sodium chloride	7647-14-5	✓	✓	950(e)
Sodium citrate	Sodium citrate	994-36-5	✓	✓	950(e)
Sodium humate	Humic acids, sodium salts	68131-04-4	✓	✓	950(e)
Sodium oleate	Sodium oleate	143-19-1	✓	✓	910
Sodium ricinoleate	9-Octadecenoic acid, 12-hydroxy-, monosodium salt, (9Z,12R)-	5323-95-5	✓		
Sodium stearate	Octadecanoic acid, sodium salt	822-16-2	✓	✓	910
Sodium sulfate	Sodium sulfate	7757-82-6	✓	✓	910, 930
Sorbitol	D-glucitol	50-70-4	✓	✓	950(e)
Soy protein	Soy protein	N/A	✓		
Soya lecithins	Lecithins, soya	8030-76-0	✓	✓	950(e)
Soybean hulls	Soybean hulls	N/A	✓	✓	950(b)
Soybean meal	Soybean meal	68308-36-1	✓	✓	1071
Soybean, flour	Soybean, flour	68513-95-1	✓	✓	1071
Stearic acid	Octadecanoic acid	57-11-4	✓	✓	910, 930
Sulfur	Sulfur	7704-34-9	✓		
Syrups, hydrolyzed starch, hydrogenated	Syrups, hydrolyzed starch, hydrogenated	68425-17-2	✓	✓	950(e)
Tetraglyceryl monooleate	9-Octadecenoic acid (9Z)-, monoester with tetraglycerol	71012-10-7	✓		
Tricalcium citrate	Citric acid, calcium salt (2:3)	813-94-5	✓	✓	950(e)
Triethyl citrate	Citric acid, triethyl ester	77-93-0	✓	✓	950(e)
Tripotassium citrate	Citric acid, tripotassium salt	866-84-2	✓	✓	950(e)
Tripotassium citrate monohydrate	Citric acid, tripotassium salt, monohydrate	6100-05-6	✓	✓	950(e)
Trisodium citrate	Citric acid, trisodium salt	68-04-2	✓	✓	950(e)
Trisodium citrate dehydrate	Citric acid, trisodium salt, dehydrate	6132-04-3	✓	✓	950(e)
Trisodium citrate pentahydrate	Citric acid, trisodium salt, pentahydrate	6858-44-2	✓	✓	950(e)
Ultramarine blue	C.I. Pigment Blue 29	57455-37-5	✓	✓	950(e)

<b>Label Display Name</b>	<b>Chemical Name</b>	<b>CAS No.</b>	<b>Nonfood Use</b>	<b>Food Use</b>	<b>Tolerance Exemption Citation 40 CFR 180.xxx<sup>1,2</sup></b>
Urea	Urea	57-13-6	✓	✓	950(e)
Vanillin	Benzaldehyde, 4-hydroxy-3-methoxy-	121-33-5	✓	✓	950(e)
Vermiculite	Vermiculite	1318-00-9	✓	✓	910
Vinegar	Vinegar (maximum 8% acetic acid in solution)	8028-52-2	✓	✓	950(a)
Vitamin C	L-Ascorbic acid	50-81-7	✓	✓	950(e)
Vitamin E	Vitamin E	1406-18-4	✓	✓	910
Walnut flour	Walnut flour	N/A	✓		
Walnut shells	Walnut shells	N/A	✓	✓	950(b)
Wheat	Wheat	N/A	✓	✓	1071
Wheat flour	Wheat flour	N/A	✓	✓	1071
Wheat germ oil	Wheat germ oil	8006-95-9	✓	✓	950(c)
Wheat oil	Oils, wheat	68917-73-7	✓	✓	1071
Whey	Whey	92129-90-3	✓	✓	1071
White mineral oil	White mineral oil (petroleum)	8042-47-5	✓	✓	910, 930
Wintergreen oil	Wintergreen oil	68917-75-9	✓		
Wollastonite	Wollastonite (Ca(SiO <sub>3</sub> ))	13983-17-0	✓		
Wool	Wool	N/A	✓		
Xanthan gum	Xanthan gum	11138-66-2	✓	✓	950(e)
Yeast	Yeast	68876-77-7	✓	✓	950(a)
Zeolites	Zeolites (excluding erionite (CAS Reg. No. 66733-21-9))	1318-02-1	✓	✓	910
Zeolites, NaA	Zeolites, NaA	68989-22-0	✓		
Zinc iron oxide	Zinc iron oxide	12063-19-3	✓		
Zinc oxide	Zinc oxide (ZnO)	1314-13-2	✓	✓	910, 930
Zinc stearate	Octadecanoic acid, zinc salt	557-05-1	✓	✓	920, 930

If the tolerance exemption appears in.....	Then the inert ingredient may be included in a minimum risk product that is applied to:
40 CFR180.910	Growing crops or raw agricultural commodities after harvest.
40 CFR 180.920	Growing crops
40 CFR 180.930	Animals
40 CFR 180.940(a)	Food-contact surfaces in public eating places, dairy-processing equipment, and food-processing equipment and utensils
40 CFR 180.940(b)	Dairy-processing equipment, and food-processing equipment and utensils
40 CFR 180.940(c)	Food-processing equipment and utensils
40 CFR 180.950	Any food-use site
40 CFR 180.960	Any food-use site
40 CFR 180.1071	One of the 14 specified use patterns appropriate for peanuts, tree nuts, milk, soybeans, eggs, fish, crustacea, and wheat.

2/ This guidance does not create any binding requirements, although it refers to existing statutory and regulatory requirements and guidance. The guidance is not intended to and cannot be relied on to create rights, substantive or procedural, enforceable by any party in litigation with the United States. The producer is responsible to carefully read the criteria and make an evaluation of how the product meets (or does not meet) the criteria for the minimum risk exemption at 40 CFR 152.25(f) and tolerance and tolerance exemptions at 40 CFR 180.