

# OMRI

# Generic Materials List

SUPPLEMENT TO THE 2017 OMRI GENERIC MATERIALS LIST

FALL 2017

## Crop Materials

### Use Class Coding

Crop production materials are classified by OMRI according to the following use classes:

CF: Crop Fertilizers and Soil Amendments

CP: Crop Pest, Weed, and Disease Control

CT: Crop Management Tools and Production Aids

## Updated Categories

### 3-Decen-2-one

Class: CP

**NOP Reference:** 205.105

### Prohibited

Synthetic

### Alcohol, Ethyl (Ethanol)

Class: CT

May be used as disinfectant or sanitizer, including irrigation system cleaner. May be used as an adjuvant or inert ingredient in combination with permitted active pesticidal ingredients. See also INERTS – LIST 4.

**NOP Reference:** 205.601(a)(1)(i)

### Allowed with Restrictions

Synthetic

### Alcohol, Ethyl (Ethanol)

Class: CP

May be used as an algicide if the requirements of 205.206(e) are met, which requires the use of preventative, mechanical, physical, and other pest, weed, and disease management practices.

**NOP Reference:** 205.206(e); 205.601(a)(1)(i)

### Allowed with Restrictions

Synthetic

### Alcohol, Isopropyl (Isopropanol)

Class: CP

May be used as an algicide if the requirements of 205.206(e) are met, which requires the use of preventative, mechanical, physical, and other pest, weed, and disease management practices.

**NOP Reference:** 205.206(e); 205.601(a)(1)(i)

### Allowed with Restrictions

Synthetic

### Alcohol, Isopropyl (Isopropanol)

Class: CT

May be used as a disinfectant or sanitizer, including irrigation system cleaner. May be used as adjuvant or inert ingredient in combination with permitted active pesticidal ingredients. See also INERTS – LIST 4.

**NOP Reference:** 205.601(a)(1)(ii)

### Allowed with Restrictions

Synthetic

### Biochar

Class: CF, CT

Biochar is biomass that has been carbonized or charred. Sources must be untreated plant or animal material. Biochar from manure is prohibited. Pyrolysis process must not use prohibited additives. See also ASH.

**NOP Reference:** 205.105; 205.602(a); Guidance 5034-1

### Allowed

Nonsynthetic

### Biodynamic Preparations

Class: CT

Includes horn silica (501), yarrow flowers (502), chamomile (503), stinging nettle (504), oak bark (505), dandelion (506), valerian (507), and horsetail (equisetum) spray (508). For preparations containing animal manure, including horn manure spray, see BIODYNAMIC PREPARATIONS – WITH MANURE.

**NOP Reference:** 205.105

### Allowed

Nonsynthetic

This addendum reflects all changes made through November 8, 2017. Please use this addendum in conjunction with the 2017 OMRI Generic Materials List for the most current information.

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<p><b>Biodynamic Preparations – with manure</b> Class: CT Includes horn manure spray. Preparations containing animal manure that has not been fully composted in accordance with NOP requirements must comply with manure restrictions at 205.203(c)(1): May only be (i) applied to land used for a crop not intended for human consumption; (ii) incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles; or (iii) incorporated into the soil not less than 90 days prior to the harvest of a product whose edible portion does not have direct contact with the soil surface or soil particles. <b>NOP Reference:</b> 205.105; 205.203(c)(1); <i>Guidance 5034-1</i></p>	<p><b>Allowed with Restrictions</b> Nonsynthetic</p>	<p><b>Carnauba Wax</b> Class: CT Nonsynthetic forms are permitted. See also PLANTS and, in the Processing and Handling section, CARNAUBA WAX. <b>NOP Reference:</b> 205.105</p>	<p><b>Allowed</b> Nonsynthetic</p>
<p><b>Bone Char</b> Class: CF, CT <b>NOP Reference:</b> 205.105; 205.203(d)(4)</p>	<p><b>Allowed</b> Nonsynthetic</p>	<p><b>Chelates</b> Class: CF, CT Nonsynthetic chelates are permitted, including but not limited to, nonsynthetic amino acids, citric acid (to form citrate in solution), tartaric acid (made from grape wine), and gluconic acid. See also AMINO ACIDS – NONSYNTHETIC and HUMIC ACIDS. For permitted synthetic forms, see LIGNIN SULFONATES. See Glossary for definition of “chelates.” <b>NOP Reference:</b> 205.105; <i>Guidance 5034-1</i></p>	<p><b>Allowed</b> Nonsynthetic</p>
<p><b>Calcium Carbonate</b> Class: CF Nonsynthetic forms are allowed, including oystershell flour, dolomite (not slaked), aragonite, and mined limestone (CaCO<sub>3</sub>). May not be sourced from byproduct of food or paper processing. See also MINED MINERALS – UNPROCESSED. <b>NOP Reference:</b> 205.203(d)(2); <i>Guidance 5034-1</i></p>	<p><b>Allowed</b> Nonsynthetic</p>	<p><b>Chlorine Dioxide</b> Class: CT Residual chlorine levels in the water in direct crop contact (when used pre-harvest) or as water from cleaning irrigation systems applied to the soil should not exceed the maximum residual disinfectant level under the Safe Drinking Water Act (0.8 mg/L (0.8 ppm) expressed as chlorine dioxide), except that chlorine products may be used in edible sprout production according to EPA label directions. May be used up to maximum labeled rates for disinfecting and sanitizing equipment or tools. No intervening event is necessary before equipment is used in contact with organic crops. See also CHLORINE MATERIALS. See Processing and Handling section for post harvest use. <b>NOP Reference:</b> 205.601(a)(2)(ii); <i>Guidance 5026</i></p>	<p><b>Allowed with Restrictions</b> Synthetic</p>
<p><b>Calcium Hypochlorite</b> Class: CT Residual chlorine levels in the water in direct crop contact (when used pre-harvest) or as water from cleaning irrigation systems applied to the soil should not exceed the maximum residual disinfectant level under the Safe Drinking Water Act (4 mg/L (4ppm) expressed as chlorine), except that chlorine products may be used in edible sprout production according to EPA label directions. May be used up to maximum labeled rates for disinfecting and sanitizing equipment or tools. No intervening event is necessary before equipment is used in contact with organic crops. See also CHLORINE MATERIALS. See Processing and Handling section for post-harvest use. <b>NOP Reference:</b> 205.601(a)(2)(i); <i>Guidance 5026</i></p>	<p><b>Allowed with Restrictions</b> Synthetic</p>	<p><b>Chlorine Materials</b> Class: CT Includes calcium hypochlorite, sodium hypochlorite, chlorine dioxide, and hypochlorous acid generated by electrolyzed water. Residual chlorine levels in the water in direct crop contact (when used pre-harvest) or as water from cleaning irrigation systems applied to the soil should not exceed the maximum residual disinfectant level under the Safe Drinking Water Act (4 mg/L (4ppm) expressed as chlorine, or 0.8 mg/L (0.8 ppm) expressed as chlorine dioxide), except that chlorine products may be used in edible sprout production according to EPA label directions. May be used up to maximum labeled rates for disinfecting and sanitizing equipment or tools. No intervening event is necessary before equipment is used in contact with organic crops. See Processing and Handling section for post harvest use. <b>NOP Reference:</b> 205.601(a)(2); <i>Guidance 5026; Policy Memo 15-4</i></p>	<p><b>Allowed with Restrictions</b> Synthetic</p>
<p><b>Calcium Lignosulfonate</b> Class: CT Also known as “lignosulfonic acid, calcium salt.” May be used as a chelating agent or dust suppressant. May also be used as an adjuvant or inert ingredient in combination with permitted active pesticidal ingredients. See also INERTS – LIST 4 and LIGNIN SULFONATES. <b>NOP Reference:</b> 205.601(j)(4)</p>	<p><b>Allowed with Restrictions</b> Synthetic</p>	<p><b>Citric Acid – nonsynthetic</b> Class: CF, CT Nonsynthetic citric acid such as those produced from microbial fermentation of carbohydrate substances (e.g., sugar) is permitted. <b>NOP Reference:</b> 205.105</p>	<p><b>Allowed</b> Nonsynthetic</p>
<p><b>Calcium Sulfate</b> Class: CF Synthetic forms are prohibited. <b>NOP Reference:</b> 205.105</p>	<p><b>Prohibited</b> Synthetic</p>	<p><b>Cobalt – micronutrient</b> Class: CF May be used as a micronutrient. Allowed forms include cobalt oxide (CoO), cobalt sulfate (CoSO<sub>4</sub>), cobalt carbonate (CoCO<sub>3</sub>), and cobalt silicates. Those made from nitrates or chlorides are not allowed. Soil deficiency of cobalt must be documented by testing. See also MICRO-NUTRIENTS – SYNTHETIC. <b>NOP Reference:</b> 205.601(j)(6)(ii)</p>	<p><b>Allowed with Restrictions</b> Synthetic</p>
<p><b>Captan</b> Class: CP <b>NOP Reference:</b> 205.105</p>	<p><b>Prohibited</b> Synthetic</p>	<p><b>Carbon Monoxide (Exhaust Gas)</b> Class: CP <b>NOP Reference:</b> 205.105</p>	<p><b>Prohibited</b> Synthetic</p>

<p><b>Compost – mushroom media waste</b>  Class: CF  Also called mushroom compost. Mushroom media waste (see MUSHROOM MEDIA WASTE listings) that has been composted according to §205.203(c)(2) or NOP Guidance 5021 before or after mushroom production and does not include other noncomposted materials is permitted without restriction. See various COMPOST listings for composting requirements under §205.203(c)(2) and NOP Guidance 5021. If mushroom media waste contains manure and has not been fully composted, see MUSHROOM MEDIA WASTE – WITH MANURE.  <b>NOP Reference:</b> 205.203(c)(2); Guidance 5021; Guidance 5034-1</p>	<p><b>Allowed</b>  Nonsynthetic</p>	<p><b>Dolomite – mined</b>  Class: CF  Includes naturally occurring minerals containing magnesium carbonate and calcium carbonate. See also MAGNESIUM CARBONATE, CALCIUM CARBONATE, and MINED MINERALS – UNPROCESSED.  <b>NOP Reference:</b> 205.203(d)(2)</p>	<p><b>Allowed</b>  Nonsynthetic</p>
<p><b>Compost – plant materials</b>  Class: CF  Compost is acceptable if (i) made from only allowed feedstock materials; (ii) the compost undergoes an increase in temperature to at least 131°F (55°C) and remains there for a minimum of 3 days; and (iii) the compost pile is mixed or managed to ensure that all of the feedstock heats to the minimum temperature for the minimum time. Compost that contains no animal materials as feedstock may be used without restriction provided that it contains no prohibited or restricted-use plant materials. Acceptable feedstocks include, but are not limited to, by-products of agricultural commodities processing, and source-separated yard debris or “clean green.” See Glossary for definition of “compost.”  <b>NOP Reference:</b> 205.203(c); Guidance 5021</p>	<p><b>Allowed</b>  Nonsynthetic</p>	<p><b>Electrolyzed Water</b>  Class: CT  Includes hypochlorous acid generated by electrolyzed water. Residual chlorine levels in the water in direct crop contact (when used pre-harvest) or as water from cleaning irrigation systems applied to the soil should not exceed the maximum residual disinfectant level under the Safe Drinking Water Act (4 mg/L (4ppm) expressed as chlorine), except that chlorine products may be used in edible sprout production according to EPA label directions. May be used up to maximum labeled rates for disinfecting and sanitizing equipment or tools. No intervening event is necessary before equipment is used in contact with organic crops. See also CHLORINE MATERIALS. See Processing and Handling section for post-harvest use.  <b>NOP Reference:</b> 205.601(a)(2)(i); Guidance 5026; Policy Memo 15-4</p>	<p><b>Allowed with Restrictions</b>  Synthetic</p>
<p><b>Compost Tea – from composted manure feedstock</b>  Class: CF, CP  Compost tea made from compost with manure feedstocks that has been fully composted in accordance with §205.203(c)(2) or NOP Guidance 5021 is permitted for use as a fertilizer or soil amendment. Compost tea made on the farm may be used to suppress the spread of disease organisms. Compost tea sold for disease suppression must comply with all pesticide regulations. See Glossary for definition of “compost tea.” See various COMPOST listings for composting requirements under §205.203(c)(2) and NOP Guidance 5021.  <b>NOP Reference:</b> 205.203(c); NOP 5021; NOP 5034-1</p>	<p><b>Allowed with Restrictions</b>  Nonsynthetic</p>	<p><b>Fish Meal and Powder</b>  Class: CF  Must not contain synthetic stabilizers or preservatives unless provided for at §205.601(j). Animal material. See also FISH PRODUCTS listings.  <b>NOP Reference:</b> 205.105; 205.203(c)</p>	<p><b>Allowed</b>  Nonsynthetic</p>
<p><b>Coppers – micronutrient</b>  Class: CF  Includes basic copper sulfate, copper oxide (CuO), copper carbonates, copper silicates, copper sulfate, and copper oxysulfate. May be used as a micronutrient. Soil deficiency of copper must be documented by testing. See also COPPER SULFATE and MICRONUTRIENTS – SYNTHETIC.  <b>NOP Reference:</b> 205.601(j)(6)(ii)</p>	<p><b>Allowed with Restrictions</b>  Synthetic</p>	<p><b>Gluconic Acid</b>  Class: CF, CT  Produced by fermentation by <i>Aspergillus niger</i>. See also CHELATES.  <b>NOP Reference:</b> 205.105</p>	<p><b>Allowed</b>  Nonsynthetic</p>
<p><b>Diatomaceous Earth</b>  Class: CF, CT  Mined sources, including calcined forms. See also MINED MINERALS – UNPROCESSED.  <b>NOP Reference:</b> 205.105(b); 205.203(d); NOP 5034-1</p>	<p><b>Allowed</b>  Nonsynthetic</p>	<p><b>Glyphosate</b>  Class: CP  <b>NOP Reference:</b> 205.105</p> <p><b>Guano – bat or bird</b>  Class: CF  Includes bat guano, seabird guano, and decomposed and dried deposits from wild bats or wild birds. Domesticated fowl excrement is considered manure, not guano. Must not be directly treated with pesticides. Subject to raw manure restrictions at 205.203(c)(1) unless composted or processed (see COMPOST and MANURE – PROCESSED).  <b>NOP Reference:</b> 205.203(c)(1); Guidance 5034-1</p>	<p><b>Prohibited</b>  Synthetic</p>
<p><b>Diatomaceous Earth</b>  Class: CP  Mined sources, including calcined forms. For use as a pest lure, repellent, or as part of a trap, or as a disease control. May be used for other pesticidal purposes only if the requirements of 205.206(e) are met. See also MINED MINERALS – UNPROCESSED.  <b>NOP Reference:</b> 205.206(b)(3); 205.206(d)(2); 205.206(e); Guidance 5034-1</p>	<p><b>Allowed with Restrictions</b>  Nonsynthetic</p>	<p><b>Gums</b>  Class: CT  Nonsynthetic gums are allowed, including but not limited to, arabic gum, carob bean gum, guar gum, and locust bean gum. Also see entry in the Processing and Handling section.  <b>NOP Reference:</b> 205.105</p>	<p><b>Allowed</b>  Nonsynthetic</p>
		<p><b>Humic Acid Starting Materials</b>  Class: CF  Includes dry products containing humates and synthetic extractant. Must be extracted with the addition of water prior to use.  <b>NOP Reference:</b> 205.601(j)(3)</p>	<p><b>Allowed with Restrictions</b>  Synthetic</p>

<p><b>Hydrogen Peroxide</b> Class: CT Also called hydrogen dioxide. May be used as disinfectant and sanitizer, including irrigation system cleaner. <b>NOP Reference:</b> 205.601(a)(4)</p>	<p><b>Allowed with Restrictions</b> Synthetic</p>	<p><b>Maltodextrin</b> Class: CF, CT Nonsynthetic forms are permitted. <b>NOP Reference:</b> 205.105</p>	<p><b>Allowed</b> Nonsynthetic</p>
<p><b>Indole-3-butyric Acid (IBA)</b> Class: CT <b>NOP Reference:</b> 205.105</p>	<p><b>Prohibited</b> Synthetic</p>	<p><b>Manganese Products</b> Class: CF Includes manganous oxide, manganese carbonate, manganese silicate, and manganese sulfate. May be used as a micronutrient. Soil deficiency of manganese must be documented by testing. See also MICRONUTRIENTS – SYNTHETIC. <b>NOP Reference:</b> 205.601(j)(6)(ii)</p>	<p><b>Allowed with Restrictions</b> Synthetic</p>
<p><b>Iron Products</b> Class: CF Includes ferric oxide, ferric sulfate, ferrous sulfate, iron citrate, iron oxide (FeO, Fe<sub>2</sub>O<sub>3</sub>, or Fe<sub>3</sub>O<sub>4</sub>), iron sulfate (FeSO<sub>4</sub> or Fe<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>), iron carbonate (FeCO<sub>3</sub>), iron silicate, and iron tartrate. May be used as a micronutrient. Soil deficiency of iron must be documented by testing. See also FERRIC PHOSPHATE and MICRONUTRIENTS – SYNTHETIC. <b>NOP Reference:</b> 205.601(j)(6)(ii)</p>	<p><b>Allowed with Restrictions</b> Synthetic</p>	<p><b>Mined Minerals – unprocessed</b> Class: CF, CT Nonsynthetic mined minerals that are not listed on 205.602 are permitted. Must not have undergone any synthetic processing that causes change in its molecular structure, such as heating in a way that produces a chemical change in the material. Must not be processed or formulated with prohibited materials, such as synthetic dust suppressants, anticaking agents, pelleting agents or other additives. Manufacturing processes of each mineral must be reviewed individually to ensure nonsynthetic status. Minerals made synthetically or industry by-products are not permitted as nonsynthetic minerals. <b>NOP Reference:</b> 205.105; 205.203(d)</p>	<p><b>Allowed</b> Nonsynthetic</p>
<p><b>Lactic Acid</b> Class: CF, CT Produced through fermentation by <i>Lactobacillus spp.</i> <b>NOP Reference:</b> 205.105</p>	<p><b>Allowed</b> Nonsynthetic</p>	<p><b>Mined Minerals – unprocessed</b> Class: CP Nonsynthetic mined minerals that are not listed on 205.602 are permitted. Must not have undergone any synthetic processing that causes change in its molecular structure, such as heating in a way that produces a chemical change in the material. Must not be processed or formulated with prohibited dust suppressants, anti-caking agents, pelleting agents or other additives. Manufacturing processes of each mineral must be reviewed individually to ensure nonsynthetic status. Minerals made synthetically or industry by-products are not permitted as nonsynthetic minerals. For use as a pest lure, repellent, or as part of a trap, or as a disease control. May be used for other pesticidal purposes only if the requirements of 205.206(e) are met. <b>NOP Reference:</b> 205.105; 205.206(b)(3); 205.206(d)(2); 205.206(e)</p>	<p><b>Allowed with Restrictions</b> Nonsynthetic</p>
<p><b>Lactose</b> Class: CF, CT Precipitated from whey protein using ethanol. If synthetic ethanol is used, it must be removed from the final product. <b>NOP Reference:</b> 205.105; Guidance 5034-1</p>	<p><b>Allowed</b> Nonsynthetic</p>	<p><b>Molasses</b> Class: CF Both nonorganic and organic sources are permitted. Nonorganic molasses must not contain prohibited materials such as synthetic scale inhibitors, aggregation and precipitation agents, or additives to control fluidity. <b>NOP Reference:</b> 205.105; Guidance 5034-1</p>	<p><b>Allowed</b> Nonsynthetic</p>
<p><b>Lignin Sulfonates</b> Class: CT Includes these lignosulfonic acids: ammonium lignosulfonate, calcium lignosulfonate, magnesium lignosulfonate, and sodium lignosulfonate. May be used as a chelating agent, dust suppressant, and some may be used as inert ingredients in pesticide formulations. See also CALCIUM LIGNOSULFONATE, INERTS – LIST 4 and INERTS – LIST 3. Synthetic lignin sulfonates are prohibited for use as fertilizers. For example, ammonium lignosulfonate is prohibited for use as a nitrogen fertilizer. Formulated products with ammonium lignosulfonate are subject to two criteria: (1) no nitrogen claims are made on the label and/or (2) the nitrogen contribution of the ammonium lignosulfonate to the formulated product is less than 1%. <b>NOP Reference:</b> 205.601(j)(4)</p>	<p><b>Allowed with Restrictions</b> Synthetic</p>	<p><b>Monocalcium Phosphate</b> Class: CF <b>NOP Reference:</b> 205.105</p>	<p><b>Prohibited</b> Synthetic</p>
<p><b>Lime Mud</b> Class: CF <b>NOP Reference:</b> 205.105</p>	<p><b>Prohibited</b> Synthetic</p>	<p><b>Magnesium Sulfate – synthetic</b> Class: CF Includes synthetically produced Epsom salts and hydrated forms. For use as a plant or soil amendment only with a documented magnesium deficiency in soil. <b>NOP Reference:</b> 205.601(j)(5); Guidance 5034-1</p>	<p><b>Allowed with Restrictions</b> Synthetic</p>

<p><b>Mulch – Biodegradable, biobased film</b> Class: CP Must meet the following criteria as defined in 205.2: (1) meets the compostability specifications of one of the following standards: ASTM D6400, ASTM D6868, EN 13432, EN 14995, or ISO 17088; (2) Demonstrates at least 90% biodegradation absolute or relative to microcrystalline cellulose in less than two years, in soil, according to one of the following test methods: ISO 17556 or ASTM D5988; and (3) Must be biobased with content determined using ASTM D6866. Must be produced without organisms or feedstocks derived from excluded methods. All polymer feedstocks must be biobased. Synthetic polymer feedstocks, such as petrochemical resins are not allowed. Additives and processing aids such as plasticizers and colorants are permitted within the standard of identity of biodegradable biobased mulch film. <i>NOP Reference: 205.601(b)(2)(iii); Policy Memo 15-1</i></p>	<p><b>Allowed</b> Synthetic</p>	<p><b>Oxidized Lignite</b> Class: CF Humic acid treated with hydrogen peroxide is prohibited. See also HUMIC ACID. <i>NOP Reference: 205.105</i></p>	<p><b>Prohibited</b> Synthetic</p>
<p><b>Mulch – nonsynthetic</b> Class: CF, CP Nonsynthetic mulches are permitted, and include but are not limited to, wood chips, leaves, straw, and crop residues. For permitted synthetic mulches, see MULCH – PLASTIC, MULCH – BIODEGRADABLE BIOBASED FILM, and PAPER. <i>NOP Reference: 205.203(c)(3); 205.206(c)(1)</i></p>	<p><b>Allowed</b> Nonsynthetic</p>	<p><b>Oystershell Lime</b> Class: CF Ground shells from oysters. Calcined oystershell lime is considered synthetic and is not permitted as a fertilizer or soil amendment (see CALCIUM OXIDE and CALCIUM HYDROXIDE). <i>NOP Reference: 205.105; Guidance 5034-1</i></p> <p><b>Plant Extracts</b> Class: CF, CT Nonsynthetic plant extracts that are not listed on 205.602 are permitted. Nonsynthetic extractants, such as cocoa butter, alcohols, saponins, and water, may remain in final product. For information on plant extracts that are biocidal in nature see PLANT EXTRACTS – PESTICIDE. See Glossary for definition of “plant extract.” <i>NOP Reference: 205.105; Guidance 5034-1</i></p>	<p><b>Allowed</b> Nonsynthetic</p>
<p><b>Mulch – plastic</b> Class: CP Petroleum-based plastic mulch, other than polyvinyl chloride (PVC), is permitted, including mulches that are composites of paper and synthetic resins, polymers, or other nonrecycled or nonbiodegradable components. Plastic mulches must be removed from the field at the end of the growing or harvest season. For crops grown as annuals, removal must occur annually. For perennial crops, removal must occur before the plastic decomposes or breaks down such that it is not possible to effectively be removed. This allowance does not include biodegradable plastic. See also MULCH – BIODEGRADABLE BIOBASED FILM. <i>NOP Reference: 205.601(b)(2)(ii); Guidance 5034-1</i></p>	<p><b>Allowed with Restrictions</b> Synthetic</p>	<p><b>Polyoxin D Zinc Salt</b> Class: CP <i>NOP Reference: 205.105</i></p>	<p><b>Prohibited</b> Synthetic</p>
<p><b>Mushroom Media Waste</b> Class: CF Waste from mushroom production that contains only Allowed materials may be used as soil amendment, fertilizer, or compost feedstock without restriction. See also COMPOST listings for mushroom media waste that has been composted according to NOP requirements. <i>NOP Reference: 205.105; 205.203(c); Guidance 5021</i></p>	<p><b>Allowed</b> Nonsynthetic</p>	<p><b>Propane</b> Class: CP Prohibited for underground rodent control. <i>NOP Reference: 205.105; Guidance 5034-1</i></p>	<p><b>Prohibited</b> Synthetic</p>
<p><b>Mushroom Media Waste – with manure</b> Class: CF Waste from mushroom production that contains animal manure that has not been fully composted is subject to uncomposted manure restrictions: may be (i) applied to land used for a crop not intended for human consumption,(ii) incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles, or (iii) incorporated into the soil not less than 90 days prior to the harvest of a product whose edible portion does not have direct contact with the soil surface or soil particles. See also MANURE – RAW, UNCOMPOSTED and COMPOST listings. <i>NOP Reference: 205.203(c)(1)</i></p>	<p><b>Allowed with Restrictions</b> Nonsynthetic</p>	<p><b>Propylene Glycol Monolaurate (PGML)</b> Class: CP <i>NOP Reference: 205.105</i></p>	<p><b>Prohibited</b> Synthetic</p>
<p><b>Nickel Salts</b> Class: CF <i>NOP Reference: 205.105</i></p>	<p><b>Prohibited</b> Synthetic</p>	<p><b>Selenium Products</b> Class: CF Includes sulfates, carbonates, oxides, or silicates of selenium. May be used as a micronutrient. Soil deficiency of selenium must be documented by testing. See also MICRONUTRIENTS – SYNTHETIC. <i>NOP Reference: 205.601(j)(6)(ii)</i></p>	<p><b>Allowed with Restrictions</b> Synthetic</p>
		<p><b>Shellfish Meal</b> Class: CF Must not contain prohibited stabilizers or preservatives. See also CRAB/ CRUSTACEAN MEAL. <i>NOP Reference: 205.105</i></p>	<p><b>Allowed</b> Nonsynthetic</p>
		<p><b>Sodium Carbonate Peroxyhydrate</b> Class: CP (CAS #-15630-89-4) Permitted as an algicide. Federal law restricts the use of this substance in food crop production to approved food uses identified on the product label. May only be used as an algicide if the requirements of 205.206(e) are met. <i>NOP Reference: 205.601(a)(8)</i></p>	<p><b>Allowed with Restrictions</b> Synthetic</p>

**Sodium Carbonate Peroxyhydrate**      **Allowed with Restrictions**  
Class: CT      Synthetic  
(CAS #–15630–89–4) Permitted as a disinfectant and sanitizer, including irrigation system cleaner. Federal law restricts the use of this substance in food crop production to approved food uses identified on the product label.  
**NOP Reference:** 205.601(a)(8)

**Water and Wastewater**      **Allowed**  
Class: CT      Nonsynthetic  
Water and wastewater is permitted, provided that it is used in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances.  
**NOP Reference:** 205.105; Guidance 5034-1

**Sodium Chloride**      **Allowed**  
Class: CF, CT      Nonsynthetic  
Nonsynthetic sources, such as mined sources and evaporation from natural brines, only. Must not contain synthetic anti-caking agents not provided for at §205.601, or other prohibited additives.  
**NOP Reference:** 205.105

**Sodium Hypochlorite**      **Allowed with Restrictions**  
Class: CT      Synthetic  
Residual chlorine levels in the water in direct crop contact (when used pre-harvest) or as water from cleaning irrigation systems applied to the soil should not exceed the maximum residual disinfectant level under the Safe Drinking Water Act (4 mg/L (4ppm) expressed as chlorine), except that chlorine products may be used in edible sprout production according to EPA label directions. May be used up to maximum labeled rates for disinfecting and sanitizing equipment or tools. No intervening event is necessary before equipment is used in contact with organic crops. See also CHLORINE MATERIALS. See Processing and Handling section for post-harvest use.  
**NOP Reference:** 205.601(a)(2)(iii); Guidance 5026

**Streptomycin**      **Prohibited**  
Class: CP      Synthetic  
**NOP Reference:** 205.105

**Struvite (Magnesium Ammonium Phosphate)**      **Prohibited**  
Class: CF      Synthetic  
**NOP Reference:** 205.105

**Tetracycline**      **Prohibited**  
Class: CP      Synthetic  
**NOP Reference:** 205.105

**Thiram**      **Prohibited**  
Class: CP      Synthetic  
**NOP Reference:** 205.105

**Vinasse**      **Allowed**  
Class: CF      Nonsynthetic  
Nonsynthetic vinasse is permitted. Vinasse is classified as nonsynthetic if it does not contain prohibited additives, such as pH adjustors, sanitizers, ammonium compounds, antibiotics or chlorine materials and is not fortified with nitrogen.  
**NOP Reference:** 205.105

**Vitamin D3**      **Allowed with Restrictions**  
Class: CP      Synthetic  
Also known as “cholecalciferol.” May be used as a rodenticide if the requirements of 205.206(e) are met.  
**NOP Reference:** 205.601(g)

# Livestock Materials

## Use Class Coding

Materials used in the feeding and care of organic livestock are classified by OMRI in the following use classes:

- LF: Livestock Feed Ingredients
- LH: Livestock Health Care
- LP: Livestock External Parasiticides and Pesticides
- LT: Livestock Management Tools and Production Aids

## Updated Categories

**Calcium Borogluconate** **Allowed with Restrictions**  
Class: LH Synthetic  
Permitted for use as an electrolyte. Must not contain antibiotics. May only be used when preventive practices and veterinary biologics are inadequate to prevent sickness. Must not be administered in the absence of illness. See also ELECTROLYTES.  
*NOP Reference: 205.238(b); 205.238(c)(2); 205.603(a)(8)*

**Electrolytes** **Allowed with Restrictions**  
Class: LH Synthetic  
Includes, but is not limited to, sodium chloride, sodium bicarbonate, sodium carbonate, potassium chloride, and potassium bicarbonate. Electrolyte formulations may also include dextrose and glucose (See GLUCOSE). Oral and intravenous electrolytes are considered to be animal drugs by FDA. Electrolytes used on organic animals must not contain antibiotics. May only be used when preventive practices and veterinary biologics are inadequate to prevent sickness. Must not be administered in the absence of illness.  
*NOP Reference: 205.238(b); 205.238(c)(2); 205.603(a)(8)*

**Furosemide (CAS #54-31-9)** **Prohibited**  
Class: LH Synthetic  
*NOP Reference: 205.105(a)*

**Glucose** **Allowed with Restrictions**  
Class: LF Nonsynthetic  
Includes dextrose. Organic agricultural products and nonsynthetic (nonagricultural) substances are allowed. Must not be fed in amounts above those needed for adequate nutrition and health maintenance for the species at its specific stage in life.  
*NOP Reference: 205.237(a); 205.237(b)(2)*

**Glucose** **Allowed with Restrictions**  
Class: LH Synthetic/Nonsynthetic  
Includes dextrose. May only be used when preventive practices and veterinary biologics are inadequate to prevent sickness. Must not be administered in the absence of illness. See also ELECTROLYTES.  
*NOP Reference: 205.238(b); 205.603(a)(11)*

**Hydrogen Peroxide** **Allowed with Restrictions**  
Class: LT Synthetic  
Also known as "hydrogen dioxide." May only be used as a sanitizer or disinfectant, including livestock drinking water treatment.  
*NOP Reference: 205.603(a)(12)*

**Iodine** **Allowed**  
Class: LH Synthetic  
*NOP Reference: 205.603(a)(13)*

**Iodine** **Allowed with Restrictions**  
Class: LF Synthetic  
Nutrient sources include calcium iodate, calcium iodobenenate, cuprous iodide, 3,5-diiodosalicylic acid, potassium iodate, potassium iodide, sodium iodate, sodium iodide, thymol iodide. May not be fed in amounts above those needed for adequate nutrition and health maintenance for the species at its specific stage in life. See also MINERALS listings.  
*NOP Reference: 205.237(b)(2); 205.603(d)(2)*

**Iodine** **Allowed with Restrictions**  
Class: LT Synthetic  
May only be used as a sanitizer or disinfectant, including livestock drinking water treatment.  
*NOP Reference: 205.603(a)(13)*

**Iodine** **Allowed with Restrictions**  
Class: LP Synthetic  
For use as a topical treatment or external parasiticide.  
*NOP Reference: 205.603(b)(3)*

**Water and Wastewater Treatments – for reservoirs and surface runoff** **Allowed**  
Class: LT Nonsynthetic  
Includes treatments for ponds, lakes, reservoirs, surface water runoff, and wastewater collection lagoons. Nonsynthetic ingredients are permitted unless specifically restricted or prohibited. May not be used to treat livestock drinking water. See also WATER TREATMENTS for livestock drinking water and WATER TREATMENTS in Crops section.  
*NOP Reference: 205.105(a)*

# Processing Materials

## Use Class Coding and Status

Processing and handling materials are classified by OMRI according to the following uses and applications:

- PA: Processing Agricultural Ingredients and Processing Aids
- PN: Processing Nonagricultural Ingredients and Processing Aids
- PP: Processing Pest Controls
- PS: Processing Sanitizers and Cleaners
- PC: Processing Packaging and Containers

## Updated Categories

**Carbon Dioxide** **Allowed**  
Class: PN Synthetic, Nonagricultural  
May be used as ingredient or processing aid. May also be used in post-harvest handling of raw agricultural commodities.  
**NOP Reference:** 205.270(b); 205.605(b); Guidance 5023

**Carbon Dioxide** **Allowed with Restrictions**  
Class: PP Synthetic  
May only be used in conjunction with the preventative management practices provided for in paragraphs 205.271(a) and (b) and only when those practices are not effective to prevent or control pests alone.  
**NOP Reference:** 205.271(c); 205.605(b); Guidance 5023

**Chia (*Salvia hispanica L.*) – nonorganic** **Allowed with Restrictions**  
Class: PA Nonsynthetic, Agricultural  
Must be certified organic when used in processed food products labeled as ‘organic.’ Nonorganic forms may only be used in processed products labeled as ‘Made with Organic [specified ingredients]’ provided that the nonorganic agricultural ingredients are not claimed to be organic and are not produced or handled with the use of sewage sludge, excluded methods (GMOs) or ionizing radiation.  
**NOP Reference:** 205.105(e)(f)(g); 205.301(c)

**Dillweed Oil – nonorganic** **Allowed with Restrictions**  
Class: PA Nonsynthetic, Agricultural  
Must be certified organic when used in processed food products labeled as ‘organic.’ Nonorganic forms may only be used in processed products labeled as ‘Made with Organic [specified ingredients]’ provided that the nonorganic agricultural ingredients are not claimed to be organic and are not produced or handled with the use of sewage sludge, excluded methods (GMOs) or ionizing radiation.  
**NOP Reference:** 205.105(e)(f)(g); 205.301(c)

**Galangal, Frozen – nonorganic** **Allowed with Restrictions**  
Class: PA Nonsynthetic, Agricultural  
Must be certified organic when used in processed food products labeled as ‘organic.’ Nonorganic forms may only be used in processed products labeled as ‘Made with Organic [specified ingredients]’ provided that the nonorganic agricultural ingredients are not claimed to be organic and are not produced or handled with the use of sewage sludge, excluded methods (GMOs) or ionizing radiation.  
**NOP Reference:** 205.205(e)(f)(g); 205.301(c)

**Lemongrass, Frozen – nonorganic** **Allowed with Restrictions**  
Class: PA Nonsynthetic, Agricultural  
Must be certified organic when used in processed food products labeled as ‘organic.’ Nonorganic forms may only be used in processed products labeled as ‘Made with Organic [specified ingredients]’ provided that the nonorganic agricultural ingredients are not claimed to be organic and are not produced or handled with the use of sewage sludge, excluded methods (GMOs) or ionizing radiation.  
**NOP Reference:** 205.205(e)(f)(g); 205.301(c)

**Lignin Sulfonates** **Prohibited**  
Class: PN Synthetic, Nonagricultural  
**NOP Reference:** 205.105(c)

**Magnesium Carbonate** **Prohibited**  
Class: PN Synthetic/Nonsynthetic, Nonagricultural  
See also MINERALS – NUTRIENT.  
**NOP Reference:** 205.105(c)

**Peppers (Chipotle Chile) – nonorganic** **Allowed with Restrictions**  
Class: PA Nonsynthetic, Agricultural  
Must be certified organic when used in processed food products labeled as ‘organic.’ Nonorganic forms may only be used in processed products labeled as ‘Made with Organic [specified ingredients]’ provided that the nonorganic agricultural ingredients are not claimed to be organic and are not produced or handled with the use of sewage sludge, excluded methods (GMOs) or ionizing radiation.  
**NOP Reference:** 205.105(e)(f)(g); 205.301(c)