

Allowed and Prohibited Substances in Certified Organic Processing

Nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients or food group(s)).”

The following nonagricultural substances may be used as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients or food group(s))” only in accordance with any restrictions specified in this section.

Any substance used must be produced without GMO’s, ionizing radiation, or sewage sludge.

Always get your certifiers approval before using a new input.

We strongly suggest you become familiar with the federal regulations that govern organic certification [here](#).

Non-synthetic (natural) substances allowed:

Acids (Citric—produced by microbial fermentation of carbohydrate substances; and Lactic).

Agar-agar.

Animal enzymes—(Rennet—animals derived; Catalase—bovine liver; Animal lipase; Pancreatin; Pepsin; and Trypsin).

Attapulgate—as a processing aid in the handling of plant and animal oils.

Bentonite.

Calcium carbonate.

Calcium chloride.

Calcium sulfate—mined.

Carrageenan.

Dairy cultures.

Diatomaceous earth—food filtering aid only.

Enzymes—must be derived from edible, nontoxic plants, nonpathogenic fungi, or nonpathogenic bacteria.

Flavors—non-synthetic flavors may be used only when organic flavors are not commercially available. All flavors must be derived from organic or nonsynthetic sources only and must not be produced using synthetic solvents and carrier systems or any artificial preservative.

Gellan gum (CAS # 71010-52-1)—high-acyl form only.

Glucono delta-lactone—production by the oxidation of D-glucose with bromine water is prohibited.

Kaolin.

L-Malic acid (CAS # 97-67-6).

Magnesium chloride.

Magnesium sulfate, non-synthetic sources only.

Microorganisms—any food grade bacteria, fungi, and other microorganisms.

Nitrogen—oil-free grades.

Oxygen—oil-free grades.

Perlite—for use only as a filter aid in food processing.

Potassium chloride.

Potassium iodide.

Sodium bicarbonate.

Sodium carbonate.

Tartaric acid—made from grape wine.

Waxes—nonsynthetic (Wood resin).

Yeast—When used as food or a fermentation agent in products labeled as “organic,” yeast must be organic if its end use is for human consumption; nonorganic yeast may be used when organic yeast is not commercially available. Growth on petrochemical substrate and sulfite waste liquor is prohibited. For smoked yeast, non-synthetic smoke flavoring process must be documented.

Synthetics allowed:

Acidified sodium chlorite—Secondary direct antimicrobial food treatment and indirect food contact surface sanitizing. Acidified with citric acid only.

Activated charcoal (CAS #s 7440-44-0; 64365-11-3)—only from vegetative sources; for use only as a filtering aid.

Alginates.

Alginic acid (CAS #9005-32-7)

Ammonium bicarbonate—for use only as a leavening agent.

Ammonium carbonate—for use only as a leavening agent.

Ascorbic acid.

Calcium citrate.

Calcium hydroxide.

Calcium phosphates (monobasic, dibasic, and tribasic).

Carbon dioxide.

Cellulose (CAS #9004-34-6)—for use in regenerative casings, powdered cellulose as an anti-caking agent (non-chlorine bleached) and filtering aid. Microcrystalline cellulose is prohibited.

Chlorine materials—disinfecting and sanitizing food contact surfaces, equipment and facilities may be used up to maximum labeled rates. Chlorine materials in water used in direct crop or food contact are permitted at levels approved by the FDA or EPA for such purpose, provided the use is followed by a rinse with potable water at or below the maximum residual disinfectant limit for the chlorine material under the Safe Drinking Water Act. Chlorine in water used as an ingredient in organic food handling must not exceed the maximum residual disinfectant limit for the chlorine material under the Safe Drinking Water Act.

- i. Calcium hypochlorite.
- ii. Chlorine dioxide.
- iii. Hypochlorous acid—generated from electrolyzed water.
- iv. Sodium hypochlorite.

Ethylene—allowed for postharvest ripening of tropical fruit and degreening of citrus.

Ferrous sulfate—for iron enrichment or fortification of foods when required by regulation or recommended (independent organization).

Glycerides (mono and di)—for use only in drum drying of food.

Hydrogen peroxide.

Magnesium stearate—for use only in agricultural products labeled “made with organic (specified ingredients or food group(s)),” prohibited in agricultural products labeled “organic”.

Nutrient vitamins and minerals, in accordance with 21 CFR 104.20, Nutritional Quality Guidelines For Foods.

Ozone.

Peracetic acid/Peroxyacetic acid (CAS # 79-21-0)—for use in wash and/or rinse water according to FDA limitations. For use as a sanitizer on food contact surfaces.

Phosphoric acid—cleaning of food-contact surfaces and equipment only.

Potassium carbonate.

Potassium citrate.

Potassium hydroxide—prohibited for use in lye peeling of fruits and vegetables except when used for peeling peaches.

Potassium lactate—for use as an antimicrobial agent and pH regulator only.

Potassium phosphate—for use only in agricultural products labeled “made with organic (specific ingredients or food group(s)),” prohibited in agricultural products labeled “organic”.

Silicon dioxide—Permitted as a defoamer. Allowed for other uses when organic rice hulls are not commercially available.

Sodium acid pyrophosphate (CAS # 7758-16-9)—for use only as a leavening agent.

Sodium citrate.

Sodium hydroxide—prohibited for use in lye peeling of fruits and vegetables.

Sodium lactate—for use as an antimicrobial agent and pH regulator only.

Sodium phosphates—for use only in dairy foods.

Sulfur dioxide—for use only in wine labeled “made with organic grapes,” Provided, That, total sulfite concentration does not exceed 100 ppm.

Tocopherols—derived from vegetable oil when rosemary extracts are not a suitable alternative.

Xanthan gum.

Non-organically produced agricultural products allowed as ingredients in or on processed products labeled as “organic.”

Only the following non-organically produced agricultural products may be used as ingredients in or on processed products labeled as “organic,” only in accordance with any restrictions specified in this section, and only when the product is not commercially available in organic form. None of these non-organic agricultural products may be used in products labeled as “100% organic.”

Carnauba wax

Casings, from processed intestines

Celery powder

Colors derived from agricultural products—Must not be produced using synthetic solvents and carrier systems or any artificial preservative:

- (1) Beet juice extract color—derived from *Beta vulgaris* L., except must not be produced from sugarbeets.
- (2) Beta-carotene extract color—derived from carrots (*Daucus carota* L.) or algae (*Dunaliella salina*).
- (3) Black currant juice color—derived from *Ribes nigrum* L.
- (4) Black/purple carrot juice color—derived from *Daucus carota* L.
- (5) Blueberry juice color—derived from blueberries (*Vaccinium* spp.).
- (6) Carrot juice color—derived from *Daucus carota* L.
- (7) Cherry juice color—derived from *Prunus avium* (L.) L. or *Prunus cerasus* L.
- (8) Chokeberry, aronia juice color—derived from *Aronia arbutifolia* (L.) Pers. or *Aronia melanocarpa* (Michx.) Elliott.
- (9) Elderberry juice color—derived from *Sambucus nigra* L.
- (10) Grape juice color—derived from *Vitis vinifera* L.
- (11) Grape skin extract color—derived from *Vitis vinifera* L.
- (12) Paprika color—derived from dried powder or vegetable oil extract of *Capsicum annuum* L.
- (13) Pumpkin juice color—derived from *Cucurbita pepo* L. or *Cucurbita maxima* Duchesne.

(14) Purple sweet potato juice color—derived from *Ipomoea batatas* L. or *Solanum tuberosum* L.

(15) Red cabbage extract color—derived from *Brassica oleracea* L.

(16) Red radish extract color—derived from *Raphanus sativus* L.

(17) Saffron extract color—derived from *Crocus sativus* L.

(18) Turmeric extract color—derived from *Curcuma longa* L.

Fish oil (Fatty acid CAS #'s: 10417-94-4, and 25167-62-8)—stabilized with organic ingredients or only with ingredients on the National List, §§ 205.605 and 205.606.

Fructooligosaccharides (CAS # 308066-66-2).

Gelatin (CAS # 9000-70-8).

Glycerin (CAS # 56-81-5)—produced from agricultural source materials and processed using biological or mechanical/physical methods allowed in organic production.

(Gums—water extracted only (Arabic; Guar; Locust bean; and Carob bean).

Inulin-oligofructose enriched (CAS # 9005-80-5).

Kelp—for use only as a thickener and dietary supplement.

Konjac flour (CAS # 37220-17-0).

Lecithin—de-oiled.

Orange pulp, dried.

Orange shellac-unbleached (CAS # 9000-59-3).

Pectin (non-amidated forms only).

Potassium acid tartrate.

Seaweed, Pacific kombu.

Starches:

(1) Cornstarch (native).

(2) Sweet potato starch—for bean thread production only.

Tragacanth gum (CAS # 9000-65-1).

Turkish bay leaves.

Wakame seaweed (*Undaria pinnatifida*).

Whey protein concentrate.