

List of substances	Limitations
Imino-bis-ethylamine. Imino-bis-propylamine. <i>N</i> -Oleoyl- <i>N</i> -stearoylethylenediamine. Polyamines made by reacting ethylenediamine or triethylenediamine with dichloroethane or dichloropropane. Tetraethylenepentamine. Triethylenetetramine. Xylene.. Xylene sulfonic acid-formaldehyde condensate, sodium salt. Zinc stearate..	

[42 FR 14554, Mar. 15, 1977]

EDITORIAL NOTE: For additional FEDERAL REGISTER citations affecting §176.180, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 176.200 Defoaming agents used in coatings.

The defoaming agents described in this section may be safely used as components of articles intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food, subject to the provisions of this section.

(a) The defoaming agents are prepared as mixtures of substances described in paragraph (d) of this section.

(b) The quantity of any substance employed in the formulation of defoaming agents does not exceed the amount reasonably required to accomplish the intended physical or technical

effect in the defoaming agents or any limitation further provided.

(c) Any substance employed in the production of defoaming agents and which is the subject of a regulation in parts 174, 175, 176, 177, 178 and §179.45 of this chapter conforms with any specification in such regulation.

(d) Substances employed in the formulation of defoaming agents include:

(1) Substances generally recognized as safe in food.

(2) Substances subject to prior sanction or approval for use in defoaming agents and used in accordance with such sanction or approval.

(3) Substances identified in this paragraph (d)(3) and subject to such limitations as are provided:

List of substances	Limitations
<i>n</i> -Butyl alcohol. <i>tert</i> -Butyl alcohol. Butyl stearate. Castor oil, sulfated, ammonium, potassium, or sodium salt. Cetyl alcohol. Cyclohexane. Cyclohexanol. Diethylene glycol monolaurate. Diethylene glycol monostearate. Dimers and trimers of unsaturated C ₁₈ fatty acids derived from: Animal and vegetable fats and oils. Tall oil. Dimethylpolysiloxane. α -(Dinonylphenyl)- ω -hydroxy-poly(oxy-1,2-ethanediyl), containing 7 to 24 moles of ethylene oxide per mole of dinonylphenol (CAS Reg. No. 9014-93-1). Dipropylene glycol. Ethyl alcohol. Fats and oils derived from animal, marine, or vegetable sources: Fatty acids derived from animal, marine, or vegetable fats and oils, and salts of such acids, single or mixed, as follows: Aluminum.. Ammonium.. Calcium.. Magnesium..	For use only at levels not to exceed 0.1% by weight of total coating solids. For use only in defoaming agents for the production of styrene-butadiene coatings at a level not to exceed 0.05 percent by weight of the finished coating.

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List of substances	Limitations
Potassium.. Sodium.. Zinc..	
Formaldehyde Glyceryl mono-12-hydroxystearate. Glyceryl monostearate. Hexane. Hexylene glycol (2-methyl-2,4-pentanediol). Isobutyl alcohol. Isopropyl alcohol. Kerosene. Lecithin hydroxylated. Methyl alcohol. Methylcellulose. Methyl esters of fatty acids derived from animal, marine, or vegetable fats and oils. Methyl oleate. Methyl palmitate. Mineral oil. Mustardseed oil, sulfated, ammonium, potassium, or sodium salt. Myristyl alcohol. Naphtha. β-Naphthol	For use as preservative of defoamer only.
Nonylphenol.	For use as preservative of defoamer only.
Odorless light petroleum hydrocarbons	As defined in § 178.3650 of this chapter.
Oleic acid, sulfated, ammonium, potassium, or sodium salt. Parachlorometacresol	For use as preservative of defoamer only.
Peanut oil, sulfated, ammonium, potassium, or sodium salt. Petrolatum.	
Pine oil. Polyacrylic acid, sodium salt	As a stabilizer and thickener in defoaming agents containing dimethylpolysiloxane.
Polyethylene. Polyethylene, oxidized. Polyethylene glycol (200) dilaurate. Polyethylene glycol (400) dioleate. Polyethylene glycol (600) dioleate. Polyethylene glycol (400) esters of coconut oil fatty acids. Polyethylene glycol (400) monooleate. Polyethylene glycol (600) monooleate. Polyethylene glycol (600) monoricinoleate. Polyethylene glycol (400) monostearate. Polyoxybutylene-polyoxypropylene-polyoxyethylene glycol (min. mol. wt. 3,700). Polyoxyethylated (min. 3 mols) cetyl alcohol. Polyoxyethylated (min. 5 mols) oleyl alcohol. Polyoxyethylated (min. 1.5 mols) tridecyl alcohol. Polyoxyethylene (min. 15 mols) ester of rosin. Polyoxyethylene (min. 8 mols) monooleate. Polyoxyethylene (40) stearate. Polyoxypropylated (min. 20 mols) butyl alcohol. Polyoxypropylene glycol (min. mol. wt. 200). Polyoxypropylene (min. 20 mols) oleate butyl ether. Polyoxypropylene-polyoxyethylene glycol (min. mol. wt. 1,900). Polyoxypropylene (min. 40 mols) stearate butyl ether.	
Potassium pentachlorophenate	For use as preservative of defoamer only.
Potassium trichlorophenate	Do.
Propylene glycol monoester of soybean oil fatty acids. Propylene glycol monoester of tallow fatty acids.	
Ricebran oil, sulfated, ammonium, potassium, or sodium salt. Rosins and rosin derivatives	As provided in § 178.3870 of this chapter.
Silica.	
Sodium 2-mercaptobenzothiazole	For use as preservative of defoamer only.
Sodium pentachlorophenate	Do.
Sodium trichlorophenate	Do.
Sperm oil, sulfated, ammonium, potassium, or sodium salt. Stearyl alcohol. Tall oil fatty acids. Tallow fatty acids, hydrogenated or sulfated. Tallow, sulfated, ammonium, potassium, or sodium salt. Triethanolamine. Triisopropanolamine. Waxes, petroleum.	

(e) The defoaming agents are used as follows:

(1) The quantity of defoaming agent or agents used shall not exceed the amount reasonably required to accomplish the intended effect, which is to prevent or control the formation of foam.

(2) The defoaming agents are used in the preparation and application of coatings for paper and paperboard.

[42 FR 14554, Mar. 15, 1977, as amended at 62 FR 39772, July 24, 1997]

§ 176.210 Defoaming agents used in the manufacture of paper and paperboard.

Defoaming agents may be safely used in the manufacture of paper and paperboard intended for use in packaging, transporting, or holding food in accordance with the following prescribed conditions:

(a) The defoaming agents are prepared from one or more of the substances named in paragraph (d) of this section, subject to any prescribed limitations.

(b) The defoaming agents are used to prevent or control the formation of foam during the manufacture of paper and paperboard prior to and during the sheet-forming process.

(c) The quantity of defoaming agent or agents added during the manufacturing process shall not exceed the amount necessary to accomplish the intended technical effect.

(d) Substances permitted to be used in the formulation of defoaming agents include substances subject to prior sanctions or approval for such use and employed subject to the conditions of such sanctions or approvals, substances generally recognized as safe for use in food, substances generally recognized as safe for use in paper and paperboard, and substances listed in this paragraph, subject to the limitations, if any, prescribed.

(1) Fatty triglycerides, and the fatty acids, alcohols, and dimers derived therefrom:

Beef tallow.
Castor oil.
Coconut oil.
Corn oil.
Cottonseed oil.
Fish oil.

Lard oil.
Linseed oil.
Mustardseed oil.
Palm oil.
Peanut oil.
Rapeseed oil.
Ricebran oil.
Soybean oil.
Sperm oil.
Tall oil.

(2) Fatty triglycerides, and marine oils, and the fatty acids and alcohols derived therefrom (paragraph (d)(1) of this section) reacted with one or more of the following, with or without dehydration, to form chemicals of the category indicated in parentheses:

Aluminum hydroxide (soaps).
Ammonia (amides).
Butanol (esters).
Butoxy-polyoxypropylene, molecular weight 1,000-2,500 (esters).
Butylene glycol (esters).
Calcium hydroxide (soaps).
Diethanolamine (amides).
Diethylene glycol (esters).
Ethylene glycol (esters).
Ethylene oxide (esters and ethers).
Glycerin (mono- and diglycerides).
Hydrogen (hydrogenated compounds).
Hydrogen (amines).
Isobutanol (esters).
Isopropanol (esters).
Magnesium hydroxide (soaps).
Methanol (esters).
Morpholine (soaps).
Oxygen (air-blown oils).
Pentaerythritol (esters).
Polyoxyethylene, molecular weights 200, 300, 400, 600, 700, 1,000, 1,540, 1,580, 1,760, 4,600 (esters).
Polyoxypropylene, molecular weight 200-2,000 (esters).
Potassium hydroxide (soaps).
Propanol (esters).
Propylene glycol (esters).
Propylene oxide (esters).
Sodium hydroxide (soaps).
Sorbitol (esters).
Sulfuric acid (sulfated and sulfonated compounds).
Triethanolamine (amides and soaps).
Triisopropanolamine (amides and soaps).
Trimethylolthane (esters).
Zinc hydroxide (soaps).

(3) Miscellaneous:

Alcohols and ketone alcohol mixture (still-bottom product from C₁₂-C₁₈ alcohol manufacturing process).
Amyl alcohol.
Butoxy polyethylene polypropylene glycol molecular weight 900-4,200.
Butoxy-polyoxypropylene molecular weight 1,000-2,500.