

**Subpart A—Foods**

**§ 73.1 Diluents in color additive mixtures for food use exempt from certification.**

The following substances may be safely used as diluents in color additive mixtures for food use exempt from certification, subject to the condition that each straight color in the mixture has been exempted from certification or, if not so exempted, is from a batch that has previously been certified and has not changed in composition since cer-

tification. If a specification for a particular diluent is not set forth in this part 73, the material shall be of a purity consistent with its intended use.

(a) *General use.* (1) Substances that are generally recognized as safe under the conditions set forth in section 201(s) of the act.

(2) Substances meeting the definitions and specifications set forth under subchapter B of this chapter, and which are used only as prescribed by such regulations.

(3) The following:

Substances	Definitions and specifications	Restrictions
Calcium disodium EDTA (calcium disodium ethyl- enediamine- tetraacetate).	Contains calcium disodium ethyl- enediamine- tetraacetate dihydrate (CAS Reg. No. 6766-87-6) as set forth in the Food Chemicals Codex, 3d ed., p. 50, 1981.	May be used in aqueous solutions and aqueous dispersions as a preservative and sequestrant in color additive mixtures intended only for ingested use; the color additive mixture (solution or dispersion) may contain not more than 1 percent by weight of the diluent (calculated as anhydrous calcium disodium ethyl- enediamine-tetraacetate).
Castor oil .....	As set forth in U.S.P. XVI .....	Not more than 500 p.p.m. in the finished food. Labeling of color additive mixtures containing castor oil shall bear adequate directions for use that will result in a food meeting this restriction.
Diocylsodium sulfosuccinate .....	As set forth in sec. 172.810 of this chapter.	Not more than 9 p.p.m. in the finished food. Labeling of color additive mixtures containing diocylsodium sulfosuccinate shall bear adequate directions for use that will result in a food meeting this restriction.
Disodium EDTA (disodium ethyl- enediamine- tetraacetate).	Contains disodium ethyl- enediamine- tetraacetate dihydrate (CAS Reg. No. 6381-92-6) as set forth in the Food Chemicals Codex, 3d ed., p. 104, 1981.	May be used in aqueous solutions and aqueous dispersions as a preservative and sequestrant in color additive mixtures intended only for ingested use; the color additive mixture (solution or dispersion) may contain not more than 1 percent by weight of the diluent (calculated as anhydrous disodium ethyl- enediamine- tetraacetate).

(b) *Special use—(1) Diluents in color additive mixtures for marking food—(i) Inks for marking food supplements in tablet form, gum, and confectionery.* Items listed in paragraph (a) of this section and the following:

Substances	Definitions and specifications	Restrictions
Alcohol, SDA-3A .....	As set forth in 26 CFR pt. 212 .....	No residue.
<i>n</i> -Butyl alcohol .....	.....	Do.
Cetyl alcohol .....	As set forth in N.F. XI .....	Do.
Cyclohexane .....	.....	Do.
Ethyl cellulose .....	As set forth in sec. 172.868 of this chapter.	.....
Ethylene glycol monoethyl ether .....	.....	Do.
Isobutyl alcohol .....	.....	Do.
Isopropyl alcohol .....	.....	Do.
Polyoxyethylene sorbitan monooleate (polysorbate 80).	As set forth in sec. 172.840 of this chapter.	.....
Polyvinyl acetate .....	Molecular weight, minimum 2,000.	.....
Polyvinylpyrrolidone .....	As set forth in sec. 173.55 of this chapter.	.....
Rosin and rosin derivatives .....	As set forth in sec. 172.615 of this chapter.	.....
Shellac, purified .....	Food grade.	.....

(ii) *Inks for marking fruit and vegetables.* Items listed in paragraph (a) of this section and the following:

Substances	Definitions and specifications	Restrictions
Acetone .....	As set forth in N.F. XI .....	No residue.
Alcohol, SDA-3A .....	As set forth in 26 CFR pt. 212 .....	Do.
Benzoin .....	As set forth in U.S.P. XVI.	
Copal, Manila .....	.	
Ethyl acetate .....	As set forth in N.F. XI .....	Do.
Ethyl cellulose .....	As set forth in sec. 172.868 of this chapter.	
Methylene chloride .....	.....	Do.
Polyvinylpyrrolidone .....	As set forth in sec. 173.55 of this chapter.	
Rosin and rosin derivatives .....	As set forth in sec. 172.615 of this chapter.	
Silicon dioxide .....	As set forth in sec. 172.480 of this chapter.	Not more than 2 pct of the ink solids.
Terpene resins, natural .....	As set forth in sec. 172.615 of this chapter.	
Terpene resins, synthetic .....	Polymers of $\alpha$ - and $\beta$ -pinene.	

(2) *Diluents in color additive mixtures for coloring shell eggs.* Items listed in paragraph (a) of this section and the following, subject to the condition that there is no penetration of the color additive mixture or any of its components through the eggshell into the egg:

Alcohol, denatured, formula 23A (26 CFR part 212), Internal Revenue Service.  
 Damar gum (resin).  
 Diethylene glycol distearate.  
 Dioctyl sodium sulfosuccinate.  
 Ethyl cellulose (as identified in § 172.868 of this chapter).

Ethylene glycol distearate.  
 Japan wax.  
 Limed rosin.  
 Naphtha.  
 Pentaerythritol ester of fumaric acid-rosin adduct.  
 Polyethylene glycol 6000 (as identified in § 172.820 of this chapter).  
 Polyvinyl alcohol.  
 Rosin and rosin derivatives (as identified in § 172.820 of this chapter).

(3) *Miscellaneous special uses.* Items listed in paragraph (a) of this section and the following:

Substances	Definitions and specifications	Restrictions
Polyvinylpyrrolidone .....	As set forth in sec. 173.55 of this chapter.	In or as food-tablet coatings; limit, not more than 0.1 pct in the finished food; labeling of color additive mixtures containing polyvinylpyrrolidone shall bear adequate directions for use that will result in a food meeting this restriction.

[42 FR 15643, Mar. 22, 1977, as amended at 57 FR 32175, July 21, 1992]

**§ 73.30 Annatto extract.**

(a) *Identity.* (1) The color additive annatto extract is an extract prepared from annatto seed, *Bixa orellana* L., using any one or an appropriate combination of the food-grade extractants listed in paragraph (a)(1) (i) and (ii) of this section:

(i) Alkaline aqueous solution, alkaline propylene glycol, ethyl alcohol or alkaline solutions thereof, edible vegetable oils or fats, mono- and

diglycerides from the glycerolysis of edible vegetable oils or fats. The alkaline alcohol or aqueous extracts may be treated with food-grade acids to precipitate annatto pigments, which are separated from the liquid and dried, with or without intermediate recrystallization, using the solvents listed under paragraph (a)(1)(ii) of this section. Food-grade alkalis or carbonates may be added to adjust alkalinity.

(ii) Acetone, ethylene dichloride, hexane, isopropyl alcohol, methyl alcohol, methylene chloride, trichloroethylene.