Carminic acid, not less than 50.0 percent.

Carmine and cochineal extract shall be pasteurized or otherwise treated to destroy all viable Salmonella microorganisms. Pasteurization or such other treatment is deemed to permit the adding of safe and suitable substances (other than chemical preservatives) that are essential to the method of pasteurization or other treatment used. For the purposes of this paragraph, safe and suitable substances are those substances that perform a useful function in the pasteurization or other treatment to render the carmine and cochineal extract free of viable Salmonella microorganisms, which substances are not food additives as defined in section 201(s) of the act or, if they are food additives as so defined, are used in conformity with regulations established pursuant to section 409 of the act.

(c) Uses and restrictions. Carmine and cochineal extract may be safely used for coloring foods generally in amounts consistent with good manufacturing practice, except that they may not be used to color foods for which standards of identity have been promulgated under section 401 of the act unless added color is authorized by such standards.

(d) Labeling requirements. (1) The label of the color additives and any mixtures prepared therefrom shall conform to the requirements of §201.20 of this chapter.

(2) The label of food products intended solely or in part for coloring purposes prepared therefrom shall contain the following specifications and shall be free from impurities other than those named to the extent that such impurities may be avoided by good manufacturing practice:

   (1) Moisture, not more than 5.0 percent.
   (2) Solvent residues (acetone, ethanol, and hexane), not more than 50 parts per million, singly or, in combination.
   (3) Total copper, not less than 4 percent and not more than 6 percent.
   (4) Free copper, not more than 200 parts per million.
   (5) Lead (as Pb), not more than 10 parts per million.
   (6) Arsenic (as As), not more than 3 parts per million.
   (7) Mercury (as Hg), not more than 0.5 part per million.
   (8) Ratio of absorbance at 405 nanometers (nm) to absorbance at 630 nm, not less than 3.4 and not more than 3.9.
   (9) Total copper chlorophyllins, not less than 95 percent of the sample dried at 100 °C for 1 hour.

(c) Uses and restrictions. Sodium copper chlorophyllin may be safely used to color citrus-based dry beverage mixes in an amount not exceeding 0.2 percent in the dry mix.

(d) Labeling requirements. The label of the color additive and any mixtures prepared therefrom shall conform to the requirements of §201.20 of this chapter.

(e) Exemption from certification. Certification of this color additive is not necessary for the protection of the public health, and therefore batches thereof are exempt from the certification requirements of section 223.5 of this chapter.

§ 73.125 Sodium copper chlorophyllin.

(a) Identity. (1) The color additive sodium copper chlorophyllin is a green to black powder prepared from chlorophyll by saponification and replacement of magnesium by copper. Chlorophyll is extracted from alfalfa (Medicago sativa) using any one or a combination of the solvents acetone, ethanol, and hexane.

(b) Specifications. Sodium copper chlorophyllin shall conform to the following specifications and shall be free from impurities other than those named to the extent that such impurities may be avoided by good manufacturing practice:

   (1) Moisture, not more than 5.0 percent.
   (2) Solvent residues (acetone, ethanol, and hexane), not more than 50 parts per million, singly or, in combination.
   (3) Total copper, not less than 4 percent and not more than 6 percent.
   (4) Free copper, not more than 200 parts per million.
   (5) Lead (as Pb), not more than 10 parts per million.
   (6) Arsenic (as As), not more than 3 parts per million.
   (7) Mercury (as Hg), not more than 0.5 part per million.
   (8) Ratio of absorbance at 405 nanometers (nm) to absorbance at 630 nm, not less than 3.4 and not more than 3.9.
   (9) Total copper chlorophyllins, not less than 95 percent of the sample dried at 100 °C for 1 hour.

(c) Uses and restrictions. Sodium copper chlorophyllin may be safely used to color citrus-based dry beverage mixes in an amount not exceeding 0.2 percent in the dry mix.

(d) Labeling requirements. The label of the color additive and any mixtures prepared therefrom shall conform to the requirements of §201.20 of this chapter.

(e) Exemption from certification. Certification of this color additive is not
§ 73.140 Toasted partially defatted cooked cottonseed flour.

(a) Identity. (1) The color additive toasted partially defatted cooked cottonseed flour is a product prepared as follows: Food quality cottonseed is delinted and decorticated; the meats are screened, aspirated, and rolled; moisture is adjusted, the meats heated, and the oil expressed; the cooked meats are cooled, ground, and reheated to obtain a product varying in shade from light to dark brown.

(2) Color additive mixtures for food use made with toasted partially defatted cooked cottonseed flour may contain only diluents that are suitable and that are listed in this subpart as safe in color additive mixtures for coloring foods.

(b) Specifications. Toasted partially defatted cooked cottonseed flour shall conform to the following specifications:

Arsenic: It contains no added arsenic compound and therefore may not exceed a maximum natural background level of 0.2 part per million total arsenic, calculated as As.

Lead (as Pb), not more than 10 parts per million.

Free gossypol content, not more than 450 parts per million.

(c) Uses and restrictions. The color additive toasted partially defatted cooked cottonseed flour may be safely used for coloring foods generally, in amounts consistent with good manufacturing practice, except that it may not be used to color foods for which standards of identity have been promulgated under section 401 of the act, unless added color is authorized by such standards.

(d) Labeling. The label of the color additive and any mixtures prepared therefrom and intended solely or in part for coloring purposes shall conform to the requirements of §70.25 of this chapter.

(e) Exemption from certification. Certification of this color additive is not necessary for the protection of the public health and therefore batches thereof are exempt from the certification requirements of section 721(c) of the act.

§ 73.160 Ferrous gluconate.

(a) Identity. The color additive ferrous gluconate is the ferrous gluconate defined in the Food Chemicals Codex, 3d Ed. (1981), pp. 122–123, which is incorporated by reference. Copies may be obtained from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) Specifications. Ferrous gluconate shall meet the specifications given in the Food Chemicals Codex, 3d Ed. (1981), which is incorporated by reference. The availability of this incorporation by reference is given in paragraph (a) of this section.

(c) Uses and restrictions. Ferrous gluconate may be safely used in amounts consistent with good manufacturing practice for the coloring of ripe olives.

(d) Labeling. The label of the color additive shall conform to the requirements of §70.25 of this chapter.

(e) Exemption from certification. Certification of this color additive is not necessary for the protection of the public health, and therefore batches thereof are exempt from the certification requirements of section 721(c) of the act.


§ 73.165 Ferrous lactate.

(a) Identity. The color additive ferrous lactate is the ferrous lactate defined in §184.1311 of this chapter.

(b) Specifications. Ferrous lactate shall meet the specifications given in the Food Chemicals Codex, 4th ed. (1996), pp. 154 to 155, which is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies are available from the National Academy Press, 2101 Constitution Ave. NW., Washington, DC 20418, or may be examined at the Center for Food Safety and Applied Nutrition’s Library, 5100 Paint Branch Pkwy., College Park,