Food and Drug Administration, HHS

§ 73.295 Tagetes (Aztec marigold) meal and extract.

(a) Identity. (1) The color additive tagetes (Aztec marigold) meal is the dried, ground flower petals of the Aztec marigold (Tagetes erecta L.) mixed with not more than 0.3 percent ethoxyquin.

(2) The color additive tagetes (Aztec marigold) extract is a hexane extract of the flower petals of the Aztec marigold (Tagetes erecta L.). It is mixed with an edible vegetable oil, or with an edible vegetable oil and a hydrogenated edible vegetable oil, and not more than 0.3 percent ethoxyquin. It may also be mixed with soy flour or corn meal as a carrier.

(b) Specifications. (1) Tagetes (Aztec marigold) meal is free from admixture with other plant material from Tagetes erecta L. or from plant material or flowers of any other species of plants.

(2) Tagetes (Aztec marigold) extract shall be prepared from tagetes (Aztec marigold) petals meeting the specifications set forth in paragraph (b)(1) of this section and shall conform to the following additional specifications:

\[\text{Melting point} \quad 53.5-55.0 ^\circ C\]

\[\text{Iodine value} \quad 132-145\]

\[\text{Saponification value} \quad 176-200\]

\[\text{Acid value} \quad 0.60-1.20\]

\[\text{Titer} \quad 35.5-37.0 ^\circ C\]

\[\text{Unsaponifiable matter} \quad 23.0 \text{ percent} - 27.0 \text{ percent.}\]

\[\text{Hexane residue} \quad \text{Not more than 25 p.p.m.}\]

All determinations, except the hexane residue, shall be made on the initial extract of the flower petals (after drying in a vacuum oven at 60 °C for 24 hours) prior to the addition of the oils and ethoxyquin. The hexane determination shall be made on the color additive after the addition of the vegetable oils.
hydrogenated vegetable oils, and ethoxyquin.

(c) **Uses and restrictions.** The color additives tagetes (Aztec marigold) meal and extract may be safely used in chicken feed in accordance with the following prescribed conditions:

1. The color additives are used to enhance the yellow color of chicken skin and eggs.
2. The quantity of the color additives incorporated in the feed is such that the finished feed:
   1. Is supplemented sufficiently with xanthophyll and associated carotenoids so as to accomplish the intended effect described in paragraph (c)(1) of this section; and
   2. Meets the tolerance limitation for ethoxyquin in animal feed prescribed in §73.380 of this chapter.

(d) **Labeling requirements.** The label of the color additives and any premixes prepared therefrom shall bear, in addition to the information required by §70.25 of this chapter:

1. A statement of the concentrations of xanthophyll and ethoxyquin contained therein.
2. Adequate directions to provide a final product complying with the limitations prescribed in paragraph (c) of this section.

(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.

§ 73.300 Carrot oil.

(a) **Identity.** (1) The color additive carrot oil is the liquid or the solid portion of the mixture or the mixture itself obtained by the hexane extraction of edible carrots (Daucus carota L.) with subsequent removal of the hexane by vacuum distillation. The resultant mixture of solid and liquid extractives consists chiefly of oils, fats, waxes, and carotenoids naturally occurring in carrots. The definition of carrot oil in this paragraph is for the purpose of identity as a color additive only and shall not be construed as setting forth an official standard for carrot oil or carrot oleoresin under section 401 of the act.

2. Color additive mixtures for food use made with carrot oil may contain only those diluents listed in this subpart as safe and suitable in color additive mixtures for coloring foods.

(b) **Specifications.** Carrot oil shall contain no more than 25 parts per million of hexane.

(c) **Uses and restrictions.** Carrot oil 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 the use of added color is authorized by such standards.

(d) **Labeling requirements.** The label of the color additive and any mixtures prepared therefrom 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.

§ 73.315 Corn endosperm oil.

(a) **Identity.** (1) The color additive corn endosperm oil is a reddish-brown liquid composed chiefly of glycerides, fatty acids, sitosterols, and carotenoid pigments obtained by isopropyl alcohol and hexane extraction from the gluten fraction of yellow corn grain. The definition of corn endosperm oil in this paragraph is for the purpose of definition as a color additive only and shall not be construed as a food standard of identity under section 401 of the act.

2. Color additive mixtures for food use made with corn endosperm oil may contain only those diluents listed in this subpart as safe and suitable in color additive mixtures for coloring foods.

(b) **Specifications.** Corn endosperm oil conforms to the following specifications:

Total fatty acids, not less than 85 percent.
Iodine value, 118 to 134.
Saponification value, 185 to 185.
Unsaponifiable matter, not more than 14 percent.
Hexane, not more than 25 parts per million.
Isopropyl alcohol, not more than 100 parts per million.