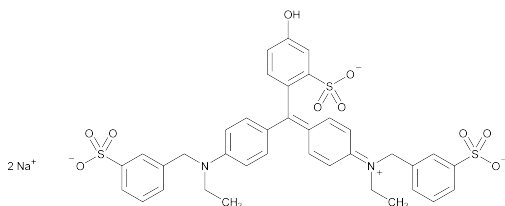


FD&C Green No. 3¹

First Published: Prior to FCC 6

Fast Green FCF²CI 42053²

Class: Triphenylmethane

C₃₇H₃₄N₂O₁₀S₃Na₂

INS: 143

UNII: 3P3ONR6O1S [fd&c green no. 3]

Formula wt 808.86

CAS: [2353-45-9]

DESCRIPTION

FD&C Green No. 3 is principally the inner salt disodium salt of *N*-ethyl-*N*-[4-[[4-[ethyl[(3-sulfophenyl)methyl]amino]phenyl](4-hydroxy-2-sulfophenyl)methylene]-2,5-cyclohexadien-1-ylidene]-3-sulfobenzene methanaminiumhydroxide, with smaller amounts of the isomeric inner salt disodium salt of *N*-ethyl-*N*-[4-[[4-[ethyl[(3-sulfophenyl)methyl]amino]phenyl](4-hydroxy-2-sulfophenyl)methylene]-2,5-cyclohexadien-1-ylidene]-4-sulfobenzene methanaminium hydroxide; of *N*-ethyl-*N*-[4-[[4-[ethyl[(4-sulfophenyl)methyl]amino]phenyl](4-hydroxy-2-sulfophenyl)methylene]-2,5-cyclohexadien-1-ylidene]-4-sulfobenzene methanaminium hydroxide; and of *N*-ethyl-*N*-[4-[[4-[ethyl[(2-sulfophenyl)methyl]amino]phenyl](4-hydroxy-2-sulfophenyl)methylene]-2,5-cyclohexadien-1-ylidene]-3-sulfobenzene methanaminium hydroxide.

Function: Color

Packaging and Storage: Store in well-closed containers. [NOTE—FDA-certifiable color additives are batch certified by the United States Food and Drug Administration using analytical chemistry methods developed for this purpose by the FDA. The color additive regulations are described in Title 21, Parts 70 to 82, of the United States *Code of Federal Regulations* (21 *CFR* Parts 70 to 82). The batch certification process is described in 21 *CFR* Part 80. Current certification analytical methods are available from the Office of Cosmetics and Colors, Colors Certification Branch (HFS-107), U.S. Food and Drug Administration, 5100 Paint Branch Parkway, College Park, Maryland 20740.]

IDENTIFICATION• **VISIBLE ABSORPTION SPECTRUM**

Acceptance criteria: A sample dissolved in 0.04 N aqueous ammonium acetate gives a spectrum

¹ To be used or sold in the United States, this color additive must be batch certified by the U.S. Food and Drug Administration. The monograph title is the name of the color additive only after batch certification has been completed.

² Generic designations; not synonyms for certified batches of color additive.

exhibiting a wavelength maximum at 625 nm, with an absorptivity of 0.156 L/(mg · cm).

ASSAY• **TOTAL COLOR**

Acceptance criteria: NLT 85%

IMPURITIES**Inorganic Impurities**• **ARSENIC (AS AS)**

Acceptance criteria: NMT 3 mg/kg

• **CHROMIUM (AS CR)**

Acceptance criteria: NMT 0.005%

• **LEAD (AS PB)**

Acceptance criteria: NMT 10 mg/kg

• **MERCURY (AS HG)**

Acceptance criteria: NMT 1 mg/kg

Organic Impurities• **UNCOMBINED INTERMEDIATES AND PRODUCTS OF SIDE****REACTIONS**

Acceptance criteria

Sum of 3- and 4-[[Ethyl(4-sulfophenyl)amino]methyl]benzenesulfonic acid, Disodium salts: NMT 0.3%

Sum of 2-, 3-, and 4-Formylbenzenesulfonic acid, Sodium salts: NMT 0.5%

2-Formyl-5-hydroxybenzenesulfonic acid, Sodium salt: NMT 0.5%

SPECIFIC TESTS• **ETHER EXTRACTS³ (COMBINED)**

Acceptance criteria: NMT 0.4%

• **LEUCO BASE**

Acceptance criteria: NMT 5%

• **SUBSIDIARY COLORS**

Acceptance criteria: NMT 6%

• **VOLATILE MATTER (AT 135°) AND CHLORIDES AND SULFATES (AS SODIUM SALTS)**

Acceptance criteria: NMT 15.0% in combination

• **WATER-INSOLUBLE MATTER**

Acceptance criteria: NMT 0.2%

FD&C Red No. 3¹

First Published: Prior to FCC 6

Erythrosine²CI 45430²

Class: Xanthene

³ Not required for certification in the United States.

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² Generic designations; not synonyms for certified batches of color additives.