

ALLURA RED AC

Prepared at the 28th JECFA (1984), published in FNP 31/1 (1984) and in FNP 52 (1992). Metals and arsenic specifications revised at the 59th JECFA (2002). An ADI of 0-7 mg/kg bw was established at the 25th JECFA (1981)

SYNONYMS

CI Food Red 17, FD&C Red No.40, CI (1975) No.16035, INS No. 129

DEFINITION

Consists essentially of disodium 6-hydroxy-5-(2-methoxy-5-methyl-4-sulfonato-phenylazo)-2-naphthalene-sulfonate and subsidiary colouring matters together with sodium chloride and/or sodium sulfate as the principal uncoloured components.

May be converted to the corresponding aluminium lake in which case only the *General Specifications for Aluminium Lakes of Colouring Matters* shall apply.

Chemical names

Disodium 6-hydroxy-5-(2-methoxy-5-methyl-4-sulfonato-phenylazo)-2-naphthalenesulfonate

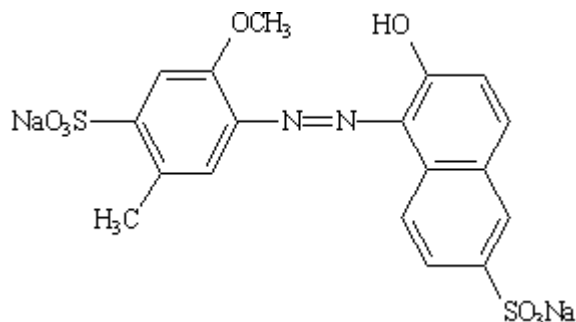
C.A.S number

25956-17-6

Chemical formula

$C_{18}H_{14}N_2Na_2O_8S_2$

Structural formula



Formula weight

496.43

Assay

Not less than 85% total colouring matters

DESCRIPTION

Dark red powder or granules

FUNCTIONAL USES

Colour

CHARACTERISTICS

IDENTIFICATION

Solubility

Soluble in water, insoluble in ethanol

Identification of colouring matters (Vol. 4)

Passes test

PURITY

Loss on drying (Vol. 4) Not more than 15% at 135° together with chloride and sulfate calculated as sodium salts

Water insoluble matter (Vol. 4) Not more than 0.2%

Lead Not more than 2 mg/kg
Determine using an atomic absorption technique appropriate to the specified level. The selection of sample size and method of sample preparation may be based on the principles of the method described in Volume 4, "Instrumental Methods."

Subsidiary colouring matters (Vol. 4) Not more than 3%
Use the following conditions:
Developing solvent: No.4
Height of ascent of solvent front: approximately 17 cm

Organic compounds other than colouring matters (Vol. 4) Not more than 0.3% of sodium 6-hydroxy-2-naphthalene sulfonate
Not more than 0.2% of 4-amino-5-methoxy-2-methyl-benzene-sulfonic acid
Not more than 1.0% of disodium 6,6'-oxybis(2-naphthalene-sulfonate)
Use *liquid chromatography* under the following conditions:
HPLC elution gradient: 0 to 18% at 1% per min (linear) then 18% to 62% at 7% per min (linear) followed by elution at 100%
Flow rate: 0.6 ml per min

Unulfonated primary aromatic amines (Vol. 4) Not more than 0.01% calculated as aniline

Ether extractable matter (Vol. 4) Not more than 0.2%

METHOD OF ASSAY Proceed as directed under *Total Content by Titration with Titanous Chloride* in Volume 4, using the following:
Amount to weigh: 0.5 - 0.6 g
Buffer: 15 g sodium hydrogen tartrate
Weight (D) of colouring matters equivalent to 1.00 ml of 0.1 N TiCl_3 : 12.41 mg