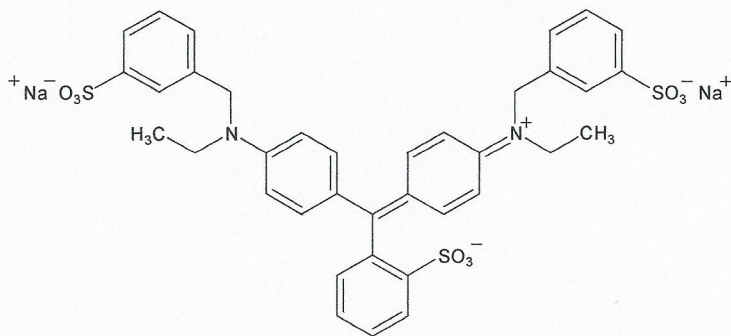


Brilliant Blue FCF

Search Monographs



The Merck Index

THE MERCK INDEX® is a trademark of Merck & Company Incorporated, Whitehouse Station, New Jersey, USA and is registered in the United States Patent and Trademark Office.

Published originally as The Merck Index, Thirteenth Edition.

Copyright © 2001 by Merck & Co., Inc., Whitehouse Station, New Jersey, USA. All Rights Reserved.

Reproduction of any portion of The Merck Index without the written consent of Merck & Co., Inc., is prohibited.



CambridgeSoft

Monograph Number: 1359

Title: Brilliant Blue FCF

CAS Registry Number: 3844-45-9

CAS Name: *N*-Ethyl-*N*-[4-[[4-[[ethyl[(3-sulfophenyl)methyl]amino]phenyl]](2-sulfophenyl)methylene]-2,5-cyclohexadien-1-ylidene]-3-sulfobenzenemethanaminium inner salt, disodium salt

Additional Names: FD & C Blue No. 1; C.I. Acid Blue 9; C.I. Food Blue 2; C.I. 42090

Molecular Formula: C₃₇H₃₄N₂Na₂O₉S₃

Molecular Weight: 792.86.

Percent Composition: C 56.05%, H 4.32%, N 3.53%, Na 5.80%, O 18.16%, S 12.13%

Literature References: Discovered by Sandmeyer in 1896: *Colour Index* vol. 4 (3rd ed., 1971) p 4385. Also prepared as the diammonium salt. Metabolism: S. M. Hess, O. G. Fitzhugh, *J. Pharmacol. Exp. Ther.* **114**, 38 (1955); J. P. Brown *et al.*, *Food Cosmet. Toxicol.* **18**, 1 (1980). Toxicology: E. Gross, *Z. Krebsforsch.* **64**, 287 (1961); W. A. Mannell, H. C. Grice, *J. Pharm. Pharmacol.* **16**, 56 (1964); W. H. Hansen *et al.*, *Toxicol. Appl. Pharmacol.* **8**, 29 (1966). Chronic toxicity and carcinogenicity: J. F. Borzelleca *et al.*, *Food Chem. Toxicol.* **28**, 221 (1990). Review of carcinogenicity studies: *IARC Monographs* **16**, 171-186 (1978).

Properties: Reddish-violet powder or granules with a metallic lustre. Absorption max: 630 nm. Sol in water, ethanol. Practically insol in vegetable oils. Pale amber soln in conc H₂SO₄, changing to yellow then greenish blue on dilution. LD₅₀ s.c. in mice: 4.6 g/kg (Gross).

Absorption maximum: Absorption max: 630 nm

Toxicity data: LD₅₀ s.c. in mice: 4.6 g/kg (Gross)

Use: Colorant in food, drugs and cosmetics. Biological stain; textile dye; wood stain; indicator.