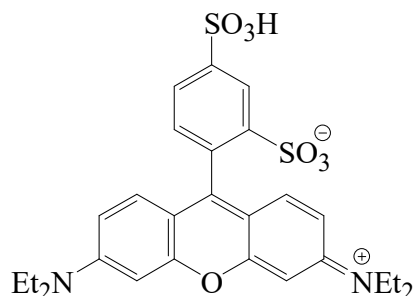




>>Entry Name: Sulforhodamine B

Synonym(s): 3,6-Bis(diethylamino)-9-(2,4-sulfophenyl)xanthylium hydroxide inner salt, 9Cl. [6-(Diethylamino)-9-(2,4-disulfophenyl)-3*H*-xanthen-3-ylidene] diethylammonium, 8Cl. C.I. Acid Red 52. Food Red 106. Lissamine Rhodamine B. C.I. 45100



CAS Registry Number: 2609-88-3

Molecular Formula: C₂₇H₃₀N₂O₇S₂

Molecular Weight: 558.675

Accurate Mass: 558.149443

Percentage Composition: C 58.05%; H 5.41%; N 5.01%; O 20.05%; S 11.48%

Use/Importance: Fluorescent dye. Used for wool, nylon, cosmetics, tunable lasers and as a histochemical stain for proteins

UV: [neutral] λ_{max} 558 () (no solvent reported)

>>Derivative: Na salt

CAS Registry Number: 3520-42-1

Extra CAS Registry Numbers(s): 53918-45-9

Molecular Formula: C₂₇H₂₉N₂NaO₇S₂

Molecular Weight: 580.657

Accurate Mass: 580.131385

Percentage Composition: C 55.85%; H 5.03%; N 4.82%; Na 3.96%; O 19.29%; S 11.04%

UV: [neutral] λ_{max} 554 () (no solvent reported)

>>Derivative: 4-Chloride

>>Derivative: 4-Anilide

Molecular Formula: C₃₃H₃₅N₃O₆S₂

Molecular Weight: 633.788

Accurate Mass: 633.196727

Percentage Composition: C 62.54%; H 5.57%; N 6.63%; O 15.15%; S 10.12%

Physical Description: Violet-brown needles (EtOH aq.)

Other Data: Dec. without melting

References:

Chadwick, C.S. *et al.*, *Immunology*, 1958, **1**, 315-327, (*chloride, synth, use*)

Ioffe, I.S. *et al.*, *Zh. Obshch. Khim.*, 1962, **32**, 1489-1492, (*chloride, anilide, synth, uv*)

Colour Index, 3rd edn., 1971, **4**, 4419, (*synth*)

Gurr, E., *Synthetic Dyes in Biology, Medicine and Chemistry*, Academic Press, 1971, 372-373, (*uv, props*)

Metrione, R.M. *et al.*, *J. Chromatogr.*, 1986, **363**, 337-344, (*chloride, use*)

Kirk-Othmer Encycl. Chem. Technol., 4th edn., Wiley, 1991, **6**, 956; **15**, 20, (*use*)

Konishi, N. *et al.*, *J. Toxicol. Pathol.*, 1992, **5**, 157-165, (*tox*)