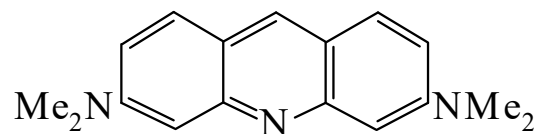




>>Entry Name: 3,6-Bis(dimethylamino)acridine, 8Cl

Synonym(s): *N,N,N',N'*-Tetramethyl-3,6-acridinediamine, 9Cl. C.I. Solvent orange 15. Acridine orange. Euchrysine



CAS Registry Number: 494-38-2

Related CAS Registry Numbers(s): 10127-02-3

Molecular Formula: C₁₇H₁₉N₃

Molecular Weight: 265.357

Accurate Mass: 265.157897

Percentage Composition: C 76.95%; H 7.22%; N 15.84%

Use/Importance: Histochemical stain. A DNA intercalator

Physical Description: Yellow needles (EtOH)

Melting Point: Mp 180-181°

Solubility: Sol. EtOH, Me₂CO

Hazard & Toxicity: Mutagenic props. LD₅₀ (mus, scu) 250 mg/kg

Aldrich: 23547-4

Sigma: A6529

>>Derivative: Hydrochloride

Synonym(s): C.I. Basic orange 14. C.I. 46005

CAS Registry Number: 65-61-2

Use/Importance: Used in extraction-photometric detn. of Re, Ta

Other Data: Orange-yellow soln. with green fluorescence in H₂O and EtOH

Aldrich: 31833-7

Fluka: 1662

Sigma: A4921

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 875C, (*ir*)

Aldrich Library of NMR Spectra, 2nd edn., 1983, **2**, 751B, (*nmr*)

Sigma-Aldrich Library of Stains, Dyes and Indicators, 62; 63

Biehringer, J., *J. Prakt. Chem.*, 1896, **54**, 243

Miethke, E. *et al.*, *Z. Phys. Chem.*, 1958, **18**, 375

Albert, A., *The Acridines*, 2nd Ed., Edward Arnold, London, 1966, (*rev*)

Tarayan, V.M. *et al.*, *Zh. Anal. Khim.*, 1972, **27**, 19, (*detn, Ta*)

Grigoryan, L.A. *et al.*, *Zavod. Lab.*, 1974, **40**, 136, (*detn, Re*)

IARC Monog., 1978, **16**, 145; *Suppl. 7*, 56, (*rev, tox*)

Martindale, The Extra Pharmacopoeia, 30th edn., *Pharmaceutical Press*, 1993, 1330

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., *Van Nostrand Reinhold*, 1992, BAQ250; BJF000