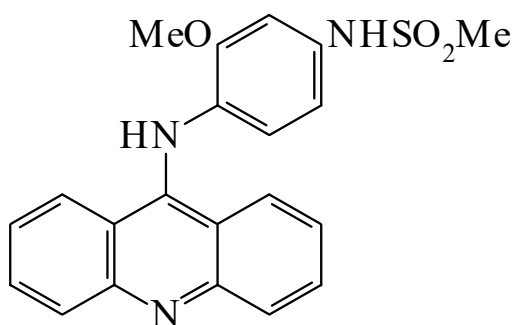




>> **Name:** Amsacrine, BAN, INN, USAN

Synonym(s): *N*-[4-(9-Acridinylamino)-3-methoxyphenyl]methanesulfonamide, 9Cl. 4'-(9-Acridylamino)methanesulfon-*m*-anisidide. Amekrin. Amsidine. Amsine. CI 880. NSC 156303. NSC 249992. AMSA. Many other names



CAS Registry Number: 51264-14-3

Molecular Formula: C₂₁H₁₉N₃O₃S

Molecular Weight: 393.465

Accurate Mass: 393.114712

Percentage Composition: C 64.11%; H 4.87%; N 10.68%; O 12.20%; S 8.15%

Use/Importance: DNA-polymerase inhibitor; antineoplastic antiviral agent. Used for treatment of acute leukaemias

Development Status: Launched 1987

pKa Value: pK_a 7.43

Calculated Log P Data: Log P 4.68 (calc)

Hazard & Toxicity: Exp. carcinogen. Mutagen

>> **Derivative:** Hydrochloride

CAS Registry Number: 54301-15-4

Physical Description: Cryst.

Melting Point: Mp 231-232°

Sigma: A9809

>> **Derivative:** Methanesulfonate

CAS Registry Number: 54301-16-5

Physical Description: Cryst.

Melting Point: Mp 299-300°

References:

Cain, B.F. *et al.*, *J. Med. Chem.*, 1975, **18**, 1110, (*synth, pharmacol*)

Buckleton, J.S. *et al.*, *Acta Cryst. C*, 1984, **40**, 1587, (*cryst struct*)

Baguley, B.C., *Drugs of Today (Barcelona)*, 1984, **20**, 237, (*rev*)

Cassileth, P.A. *et al.*, *Leuk. Res.*, 1986, **10**, 1257, (*rev*)

Van Mouwerik, T.J. *et al.*, *Drug Intell. Clin. Pharm.*, 1987, **21**, 330, (*pharmacol*)

Brons, P.P.T. *et al.*, *J. Chromatogr.*, 1987, **422**, 175, (*hplc*)

Atwell, G.J. *et al.*, *J. Med. Chem.*, 1987, **30**, 652, (*sar*)

Denny, W.A., *Chron. Drug Discovery*, 1993, **3**, 381, (*rev*)

Martindale, *The Extra Pharmacopoeia*, 30th edn., Pharmaceutical Press, 1993, 455

Gough, A. *et al.*, *Exp. Toxicol. Pathol.*, 1994, **46**, 275, (*tox*)

Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 7th edn., Akademie-Verlag, 1994, 8223, (*synonyms*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, ADL500; ADL750