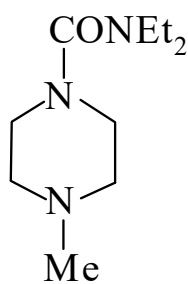




>>Entry Name: *N,N*-Diethyl-4-methyl-1-piperazinecarboxamide, 9Cl

Synonym(s): Diethylcarbamazine, BAN, INN. 1-Diethylcarbamoyl-4-methylpiperazine. Carbamazine. Caricide. Ditrazin. Notezine. Carbilazine. Spatonin. Many other names



CAS Registry Number: 90-89-1

Molecular Formula: C₁₀H₂₁N₃O

Molecular Weight: 199.295

Accurate Mass: 199.168462

Percentage Composition: C 60.27%; H 10.62%; N 21.08%; O 8.03%

Use/Importance: Drug used in treating muchereriasis, loasis, onchocerciasis, ascariasis and ankylostomiasis

Physical Description: Cryst.

Melting Point: Mp 47-49°

Boiling Point: Bp₃ 108.5-111°

Calculated Log P Data: Log P 1.75 (calc)

Other Data: Mostly used as citrate

>>Derivative: Hydrochloride

Physical Description: Cryst. (Me₂CO)

Melting Point: Mp 156.6-157°

>>Derivative: Citrate (1:1)

Synonym(s): Diethylcarbamazine citrate, USAN. Filarabits. Franocide. Banocide

CAS Registry Number: 1642-54-2

Melting Point: Mp 137-138.5°

Hazard & Toxicity: Indirect allergic effects when used therapeutically. LD₅₀ (rat, orl) 1400 mg/kg. Exp. teratogen

Rare Chemicals Library: S36048-1

Sigma: D8765

References:

Harned, B.K. *et al.*, *Ann. N.Y. Acad. Sci.*, 1948, **50**, 141, (*pharmacol, tox*)

Kushner, S. *et al.*, *J.O.C.*, 1948, **13**, 151, (*synth*)

U.S. Pat., 1949, 2 467 893; *CA*, **43**, 6245f, (*synth*)

U.S. Pat., 1949, 2 467 895; *CA*, **43**, 6245a, (*synth, derivs*)

Fujii, K. *et al.*, *Yakugaku Zasshi*, 1956, **76**, 605, (*synth*)

Faulkner, J.K. *et al.*, *Xenobiotica*, 1971, **1**, 321; 1972, **2**, 59, (*metab*)

Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 6th edn., *Akademie-Verlag*, 1987, 1785

Martindale, The Extra Pharmacopoeia, 30th edn., *Pharmaceutical Press*, 1993, 41

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., *Van Nostrand Reinhold*, 1992, DIW000; DIW200