



>>Entry Name: Fotemustine, BAN, INN

Synonym(s): Diethyl [1-[[[(2-chloroethyl)nitrosoamino]carbonyl]amino]ethyl]phosphonate, 9Cl. Muphoran. S 10036

CAS Registry Number: 92118-27-9

(EtO)2P(O)CH(CH3)NHCON(NO)CH2CH2Cl

Molecular Formula: C₉H₁₉ClN₃O₅P

Molecular Weight: 315.693

Accurate Mass: 315.075086

Percentage Composition: C 34.24%; H 6.07%; Cl 11.23%; N 13.31%; O 25.34%; P 9.81%

Use/Importance: Antineoplastic agent, active against disseminated malignant melanoma and cerebral metastases. Sometimes used in combination with Dacarbazine [BQM58-V](#)

Development Status: Launched 1989

Calculated Log P Data: Log P 1.16 (calc)

Hazard & Toxicity: LD₅₀ (mus, ipr) 60 mg/kg

>>Variant: (±)-form

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Melting Point: Mp 85°

References:

Fr. Pat., 1984, *ADIR*, 2 536 075; *CA*, **101**, 152085y, (*synth, pharmacol*)

Ings, R.M. *et al.*, *Eur. J. Cancer*, 1990, **26**, 838, (*pharmacokinet, metab*)

Bleiberg, H. *et al.*, *Eur. J. Cancer*, 1990, **26**, 1260, (*clin trials*)

Schallreuter, K.U. *et al.*, *Biochim. Biophys. Acta*, 1991, **1096**, 277

Monte, E. *et al.*, *Farm. Clin.*, 1992, **9**, 678; 680, (*rev*)

Díaz De Guereñu, M.M. *et al.*, *J. Pharm. Biomed. Anal.*, 1992, **10**, 481, (*anal*)

Khayat, D. *et al.*, *Melanoma Res.*, 1992, **2**, 147, (*clin trials, rev*)

Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, 1993, 482