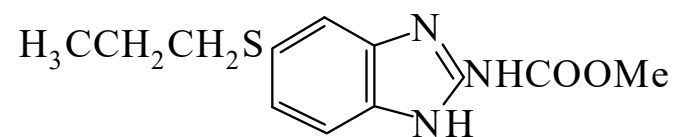




>>Entry Name: Albendazole, BAN, INN, USAN

Synonym(s): Methyl [5-(propylthio)-1*H*-benzimidazol-2-yl]carbamate, gCl. Alben. Bermosol. Eskazole. Helmintal. Valbazen. Zentel. SKF 62979. Many other names



CAS Registry Number: 54965-21-8

Molecular Formula: C₁₂H₁₅N₃O₂S

Molecular Weight: 265.335

Accurate Mass: 265.088497

Percentage Composition: C 54.32%; H 5.70%; N 15.84%; O 12.06%; S 12.09%

Use/Importance: Anthelmintic. Investigated for treatment of chronic strongyloidiasis, and for microsporidiosis in AIDS patients

Physical Description: Cryst.

Development Status: Approved in UK for vet. use only. Launched 1982

Melting Point: Mp 208-210°

Calculated Log P Data: Log P 3.88 (calc)

Hazard & Toxicity: LD₅₀ (rat, orl) 2400 mg/kg. Exp. reprod. and teratogenic effects

Aldrich: 44646-7

Sigma: A4673

>>Derivative: S-Oxide

Synonym(s): Albendazole oxide, BAN, INN. Methyl 5-(propylsulfinyl)benzimidazol-2-ylcarbamate. Albendazole sulfoxide. Rycovet bental

CAS Registry Number: 54029-12-8

Molecular Formula: C₁₂H₁₅N₃O₃S

Molecular Weight: 281.335

Accurate Mass: 281.083412

Percentage Composition: C 51.23%; H 5.37%; N 14.94%; O 17.06%; S 11.40%

Use/Importance: Veterinary anthelmintic

Physical Description: Cryst. (EtOH)

Melting Point: Mp 215-216°

Calculated Log P Data: Log P 1.83 (calc)

>>Derivative: S-Oxide; hydrochloride

CAS Registry Number: 74759-06-1

Melting Point: Mp 150 dec.°

References:

- U.S. Pat., 1975, *SmithKline*, 3 915 986; *CA*, **84**, 31074r, (*synth, pharmacol*)
Theodorides, V.J. *et al.*, *Experientia*, 1976, **32**, 702, (*pharmacol*)
U.S. Pat., 1977, *Syntex*, 4 002 640; *CA*, **86**, 171446, (*synth, oxide*)
Bogan, J.A., *Drugs of Today (Barcelona)*, 1979, **15**, 87, (*rev*)
Gyurik, R.J. *et al.*, *Drug Metab. Dispos.*, 1981, **9**, 503, (*metab*)
Bochis, R.J. *et al.*, *J. Med. Chem.*, 1981, **24**, 1518, (*props*)
Firth, M., *Int. Congr. Symp. Ser. R. Soc. Med.*, (Ed.), No. 61, 1984, (*book*)
Delatour, P. *et al.*, *Xenobiotica*, 1991, **21**, 217, (*metab*)
Martindale, The Extra Pharmacopoeia, 30th edn., *Pharmaceutical Press*, 1993, 38
Archibald, L.K. *et al.*, *Quart. J. Med.*, 1993, **86**, 191, (*use*)
Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 7th edn., *Akademie-Verlag*, 1994, 2970, (*synonyms*)
Oldfield, E.C., *Am. J. Gastroenterol.*, 1995, **90**, 159, (*use*)
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., *Van Nostrand Reinhold*, 1992, VAD000