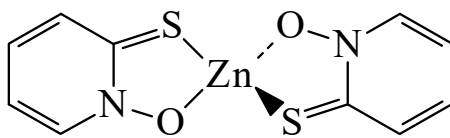




>>Entry Name: Bis[1-hydroxy-2(1*H*)-pyridinethionato-*O,S*]zinc, 11Cl

Synonym(s): Pyrithione zinc, BAN, INN, USAN. Zinc polyanemine. Omadine OM 1563. Zinc pyrithione. Bis(2-pyridylthio)zinc 1,1'-dioxide. Zinc pyridinethione. Zinc omadine. De-squaman. Vancide ZP. Many other names



CAS Registry Number: 13463-41-7

Molecular Formula: C₁₀H₈N₂O₂S₂Zn

Molecular Weight: 317.707

Accurate Mass: 315.931863

Percentage Composition: C 37.81%; H 2.54%; N 8.82%; O 10.07%; S 20.19%; Zn 20.58%

Use/Importance: Antibacterial, antifungal, antiseborrheic agent. Formerly used commercially as a pesticide. Max. conc. allowed in cosmetics in UK (as a preservative) is 0.5%

Physical Description: White solid

Melting Point: Mp 262°

Solubility: Sol. DMSO, DMF, CHCl₃; BERDY SOL: Poorly sol. hexane

UV: [neutral] λ_{max} 246 (ε 53700); 274 (ε 20000); 327 (ε 6000) (EtOH) (Berdy)

Hazard & Toxicity: Exp. neurotoxic effects (hind limb paralysis in rodents)

Sigma: Z1250

References:

Robinson, M.A., *J. Inorg. Nucl. Chem.*, 1964, **26**, 1277, (*synth, ir*)

Sahenk, Z. *et al.*, *Experimental and Clinical Neurotoxicology*, (Eds. Spencer, P.S. *et al*), Williams and Wilkins, 1980, 578, (*tox*)

Steinbrech, B. *et al.*, *Fresenius' Z. Anal. Chem.*, 1983, **316**, 465, (*synth, uv*)

Ross, J.F. *et al.*, *Neurotoxicol. Teratol.*, 1990, **12**, 153, (*tox*)

Martindale, The Extra Pharmacopoeia, 30th edn., Pharmaceutical Press, 1993, 766

Negwer, M., *Organic-Chemical Drugs and their Synonyms*, 7th edn., Akademie-Verlag, 1994, 313, (*synonyms*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, ZMJ000