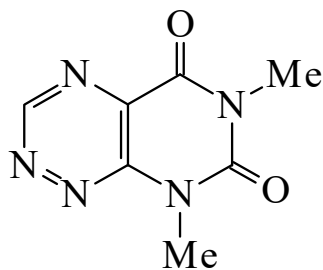




>>Entry Name: Fervenulin

Synonym(s): 6,8-Dimethylpyrimido[5,4-*e*]-1,2,4-triazine-5,7(6*H*,8*H*)-dione, 9Cl. Planomycin. Pulanomycin. Antibiotic 10204-BII



CAS Registry Number: 483-57-8

Molecular Formula: C₇H₇N₅O₂

Molecular Weight: 193.165

Accurate Mass: 193.059975

Percentage Composition: C 43.53%; H 3.65%; N 36.26%; O 16.57%

Biological Source: Isol. from *Streptomyces fervens* and *Streptomyces rubrireticuli*

Use/Importance: Active against Gram-positive and -negative bacteria and possesses antineoplastic props.

Physical Description: Yellow cryst

Melting Point: Mp 178-179°

Calculated Log P Data: Log P -0.82 (uncertain value) (calc)

UV: [acid] λ_{max} 237 (ε 17000); 275 (ε 1950); 341 (ε 4250) (pH 1) (Derep) [base] λ_{max} 230 (sh) (ε 4850); 275 (ε 1900) (pH 11) (Derep) [neutral] λ_{max} 239 (ε 17400); 277 (ε 1860); 343 (ε 4570) (EtOH) (Derep)

Other Data: Known synthetically before isolation

Hazard & Toxicity: LD₅₀ (mus, ipr) 11.2 mg/kg

Rare Chemicals Library: S45508-3

References:

Pfleiderer, W. *et al.*, *Annalen*, 1958, **615**, 42, (*synth*)

Daves, G.D. *et al.*, *J.O.C.*, 1961, **26**, 5256, (*isol, struct, uv, ir*)

Yoneda, F. *et al.*, *J. Het. Chem.*, 1970, **7**, 1443, (*synth*)

Taylor, E.C. *et al.*, *J.O.C.*, 1975, **40**, 2321, (*synth, nmr*)

Senda, S. *et al.*, *J.A.C.S.*, 1977, **99**, 7358, (*synth*)

Ichiba, M. *et al.*, *J.O.C.*, 1978, **43**, 469, (*synth, ir, uv, ms, nmr*)

CRC Handb. of Antibiotic Compounds, (eds. Bérdy, J. *et al.*), CRC Press, Boca Raton, 1984, **5**, 198, (*props*)

Werner-Simon, S. *et al.*, *J. Het. Chem.*, 1996, **33**, 949, (*synth, derivs*)

Koshino, H. *et al.*, *Heterocycles*, 2000, **52**, 811-817, (*synth*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, FBP300