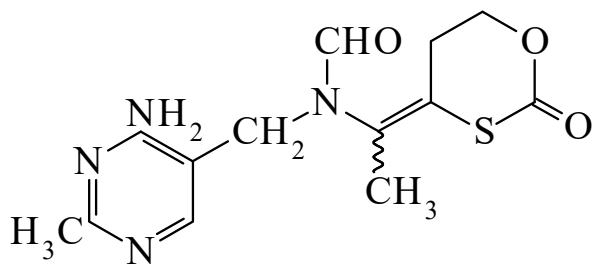




>>Entry Name: Cytotiamine, INN, JAN

Synonym(s): *N*-[(4-Amino-2-methyl-5-pyrimidinyl)methyl]-*N*-[1-(2-oxo-1,3-oxathian-4-ylidene)ethyl]formamide, 9Cl, 8Cl. Carbothiamine. Cyclocarbothiamine. Cometamin. CCT



CAS Registry Number: 6092-18-8

Molecular Formula: C₁₃H₁₆N₄O₃S

Molecular Weight: 308.36

Accurate Mass: 308.094311

Percentage Composition: C 50.64%; H 5.23%; N 18.17%; O 15.57%; S 10.40%

Use/Importance: Vitamin B₁ source, analgesic

Physical Description: Cryst. (H₂O)

Melting Point: Mp 175.5 dec.°

Hazard & Toxicity: LD₅₀ (rat, orl) 7604 mg/kg. LD₅₀ (rat, ivn) 580 mg/kg

>>Derivative: Hydrochloride

Synonym(s): Cytotiamine hydrochloride, JAN

CAS Registry Number: 19488-19-8

Physical Description: Cryst. (MeOH/EtOAc)

Melting Point: Mp 179-180 dec.°

References:

Netherlands Pat., 1966, *Yamanouchi*, 6 511 842; *CA*, **65**, 8932a, (*synth, pharmacol*)

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Martindale, The Extra Pharmacopoeia, 30th edn., *Pharmaceutical Press*, 1993, 1053