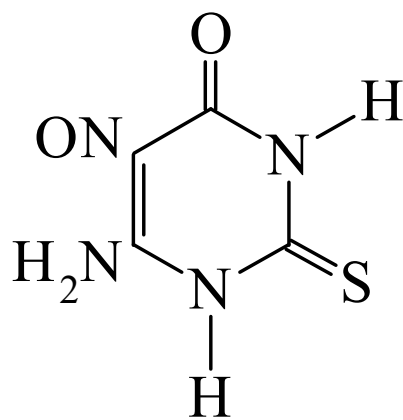




>>Entry Name: 6-Amino-2,3-dihydro-5-nitroso-2-thioxo-4(1H)-pyrimidinone, 9Cl

Synonym(s): 6-Amino-4-hydroxy-2-mercapto-5-nitrosopyrimidine. 6-Amino-5-nitroso-2-thiouracil



CAS Registry Number: 1672-48-6

Related CAS Registry Numbers(s): 15836-99-4

Molecular Formula: C₄H₄N₄O₂S

Molecular Weight: 172.167

Accurate Mass: 172.005496

Percentage Composition: C 27.91%; H 2.34%; N 32.54%; O 18.59%; S 18.62%

Use/Importance: Used as a 1mM soln. in dil. HCl for photometric detn. of Co, Cu ($\lambda_{\max}$ 386 nm), Fe(II), Ni ($\lambda_{\max}$ 380 nm), Os ($\lambda_{\max}$ 440 nm, ϵ 4300), Ru ($\lambda_{\max}$ 530 nm, ϵ 15300)

Physical Description: Cryst. (H₂O)

Solubility: Sol. acids, hot H₂O

Aldrich: 86055-7

>>Derivative: 1-Ph

Synonym(s): 6-Amino-2,3-dihydro-5-nitroso-1-phenyl-2-thioxo-4(1H)-pyrimidinone, 9Cl

CAS Registry Number: 15836-99-4

Molecular Formula: C₁₀H₈N₄O₂S

Molecular Weight: 248.265

Accurate Mass: 248.036796

Percentage Composition: C 48.38%; H 3.25%; N 22.57%; O 12.89%; S 12.92%

Use/Importance: Used for photometric detn. of Fe(II) ($\lambda_{\max}$ 670 nm, ϵ 53000)

Physical Description: Cryst.

Solubility: Insol. H₂O; sol. Me₂CO, DMF, acids

References:

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Przeszlakowski, S. *et al.*, *Chem. Anal. (Warsaw)*, 1964, **9**, 919, (*detn. Cu, Ni*)
Kishikawo, T. *et al.*, *Chem. Pharm. Bull.*, 1966, **14**, 1365, (*synth. 1-Ph*)
Kushwaha, V. *et al.*, *CA*, 1976, **85**, 86736j, (*detn. Ru, Os*)
Jain, P. *et al.*, *Curr. Sci.*, 1976, **45**, 178, (*detn. Co, Fe*)
Nakashima, K. *et al.*, *CA*, 1978, **89**, 173049p, (*use. 1-Ph*)