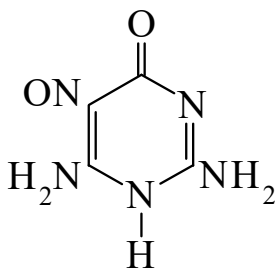




>>Entry Name: 2,6-Diamino-5-nitroso-4(1*H*)-pyrimidinone, 9CI

Synonym(s): 2,6-Diamino-4-hydroxy-5-nitrosopyrimidine



CAS Registry Number: 2387-48-6

Molecular Formula: C₄H₅N₅O₂

Molecular Weight: 155.116

Accurate Mass: 155.044325

Percentage Composition: C 30.97%; H 3.25%; N 45.15%; O 20.63%

Use/Importance: Used as a soln. in 0.02*M* KOH for photometric detn. of Co ($\lambda_{\max}$ 370 nm), Fe ($\lambda_{\max}$ 653 nm, ϵ 20000)

Physical Description: Pink cryst.

Solubility: Sol. alkalis; spar. sol. H₂O

Rare Chemicals Library: S41571-5

Sigma: D9501

>>Derivative: *N*²-Di-Et

Synonym(s): 6-Amino-2-(diethylamino)-5-nitroso-4(1*H*)-pyrimidinone, 9CI. 2-Diethylamino-4-hydroxy-5-nitroso-6-aminopyrimidine

CAS Registry Number: 131734-09-3

Molecular Formula: C₈H₁₃N₅O₂

Molecular Weight: 211.223

Accurate Mass: 211.106925

Percentage Composition: C 45.49%; H 6.20%; N 33.16%; O 15.15%

Use/Importance: Used as 0.2% aq. soln. for photometric detn. of Fe(II) ($\lambda_{\max}$ 660 nm, ϵ 30000, pH 10.2)

Physical Description: Pink needles (EtOH aq.)

Melting Point: Mp 198°

Solubility: Sol. EtOH; mod. sol. H₂O

References:

Landauer, P.D. *et al.*, *J.C.S.*, 1953, 3721, (*synth*)

McDonald, C.W. *et al.*, *Mikrochim. Acta*, 1971, 767, (*detn, Fe*)

Jimenez, R.M. *et al.*, *Afinidad*, 1983, **40**, 342; *CA*, **99**, 186537c, (*detn, Co*)

Tsuchiya, M. *et al.*, *Anal. Sci.*, 1990, **6**, 701, (*synth, deriv, detn, Fe*)