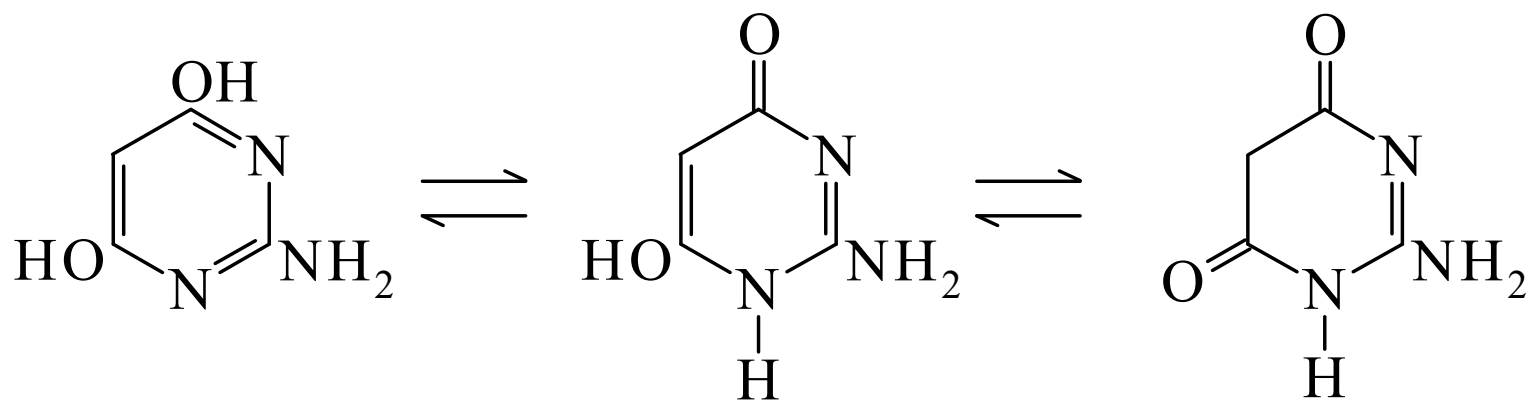




>>Entry Name: 2-Amino-4,6-dihydroxypyrimidine

Synonym(s): 2-Amino-6-hydroxy-4(1*H*)-pyrimidinone, 9Cl. 2-Amino-4,6-pyrimidinediol, 8Cl. 2-Amino-4,6(1*H*,5*H*)-pyrimidinedione. Malonylguanidine



CAS Registry Number: 56-09-7

Related CAS Registry Numbers(s): 4425-67-6

Molecular Formula: C₄H₅N₃O₂

Molecular Weight: 127.102

Accurate Mass: 127.038177

Percentage Composition: C 37.80%; H 3.96%; N 33.06%; O 25.18%

Physical Description: Cryst.

Melting Point: Mp 330°

Aldrich: A5040-1

Sigma: A4504

>>Derivative: Di-Me ether

Synonym(s): 2-Amino-4,6-dimethoxypyrimidine. 4,6-Dimethoxy-2-pyrimidinamine

CAS Registry Number: 36315-01-2

Molecular Formula: C₆H₉N₃O₂

Molecular Weight: 155.156

Accurate Mass: 155.069477

Percentage Composition: C 46.45%; H 5.85%; N 27.08%; O 20.62%

Physical Description: Prisms (Et₂O/petrol)

Melting Point: Mp 92-93°. Mp 94-96°

Boiling Point: Bp 252°

pKa Value: pK_a 3.36

>>Derivative: Di-Me ether, picrate

Physical Description: Yellow needles (MeOH/2-ethoxyethanol)

Melting Point: Mp 198-199°

References:

Fisher, H.J. *et al.*, *J.A.C.S.*, 1932, **54**, 727, (*synth, derivs*)

Rose, F.L. *et al.*, *J.C.S.*, 1946, 81-85, (*di-Me ether*)

Braker, W. *et al.*, *J.A.C.S.*, 1947, **69**, 3072, (*synth*)

Thompson, W.K. *et al.*, *J.C.S.*, 1962, 617, (*ir, deriv*)

Rembold, H. *et al.*, *Ber.*, 1963, **96**, 2786, (*synth*)

Jovanovic, M.V. *et al.*, *J. Het. Chem.*, 1987, **24**, 191, (*tautom*)

Karen, P. *et al.*, *Acta Chem. Scand.*, 1998, **52**, 1051-1055, (*cryst struct*)