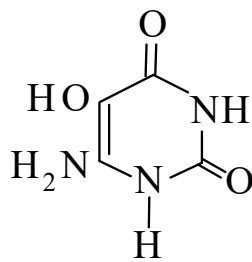




>> Name: 4-Amino-2,5,6-trihydroxypyrimidine

ENTRY UNDER REVIEW

Synonym(s): 6-Amino-5-hydroxy-2,4(1*H*,3*H*)-pyrimidinedione. 6-Amino-2,4,5-pyrimidinetriol. Isouramil. 6-Aminobarbituric acid



CAS Registry Number: 3914-34-9

Molecular Formula: C₄H₅N₃O₃

Molecular Weight: 143.102

Accurate Mass: 143.033092

Percentage Composition: C 33.57%; H 3.52%; N 29.36%; O 33.54%

Melting Point: Mp 290°

>>Derivative: 5-*O*-β-D-Glucopyranoside

Synonym(s): Convicine

CAS Registry Number: 19286-37-4

Molecular Formula: C₁₀H₁₅N₃O₈

Molecular Weight: 305.244

Accurate Mass: 305.085917

Percentage Composition: C 39.35%; H 4.95%; N 13.77%; O 41.93%

Melting Point: Mp 287 dec.°

UV: [neutral] λ_{max} 271 () (H₂O, pH 7) [acid] λ_{max} 220 (); 271 () (H₂O, pH 1) [base] λ_{max} 273 () (H₂O, pH 13)

>>Derivative: 4-*N*-Ac

Molecular Formula: C₆H₇N₃O₄

Molecular Weight: 185.139

Accurate Mass: 185.043657

Percentage Composition: C 38.93%; H 3.81%; N 22.70%; O 34.57%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 300°

>>Derivative: 5-*O*-Ac

Molecular Formula: C₆H₇N₃O₄

Molecular Weight: 185.139

Accurate Mass: 185.043657

Percentage Composition: C 38.93%; H 3.81%; N 22.70%; O 34.57%

Physical Description: Cryst. (H₂O)

Melting Point: Mp 295°

>>Derivative: 4,5-*N,O*-Di-Ac

Molecular Formula: C₈H₉N₃O₅

Molecular Weight: 227.176

Accurate Mass: 227.054222

Percentage Composition: C 42.30%; H 3.99%; N 18.50%; O 35.21%

Physical Description: Cryst. (H₂O)

Melting Point: Mp 300°

References:

Davoll, J. *et al.*, *J.C.S.*, 1956, 2124

Bien, S. *et al.*, *J.C.S.(C)*, 1968, 496

Brown, E.G. *et al.*, *Phytochemistry*, 1972, **11**, 3203, (*Convicine, isol*)

Bien, S. *et al.*, *J.C.S. Perkin I*, 1973, 1089, (*Convicine, synth*)