



>>Entry Name: 5-Chloro-2-hydroxypyrimidine

Synonym(s): 5-Chloro-2(1*H*)-pyrimidinone, 9Cl. 5-Chloro-2-pyrimidinol

CAS Registry Number: 54326-16-8

Related CAS Registry Numbers(s): 823-90-5 42748-90-3 53412-75-2 63331-59-9

Molecular Formula: C₄H₃ClN₂O

Molecular Weight: 130.533

Accurate Mass: 129.99339

Percentage Composition: C 36.81%; H 2.32%; Cl 27.16%; N 21.46%; O 12.26%

Use/Importance: Exhibits significant metaphase arresting activity on human liver cell culture

Physical Description: Orthorhombic cryst. (EtOAc)

Melting Point: Mp 237-238°

>>Variant: *NH*-form

Molecular Formula: C₄H₃ClN₂O

Molecular Weight: 130.533

Accurate Mass: 129.99339

Percentage Composition: C 36.81%; H 2.32%; Cl 27.16%; N 21.46%; O 12.26%

>>Derivative: 1-Me

Molecular Formula: C₅H₅ClN₂O

Molecular Weight: 144.56

Accurate Mass: 144.00904

Percentage Composition: C 41.54%; H 3.49%; Cl 24.52%; N 19.38%; O 11.07%

Physical Description: Solid (Me₂CO)

Melting Point: Mp 210°

>>Variant: *OH*-form

Molecular Formula: C₄H₃ClN₂O

Molecular Weight: 130.533

Accurate Mass: 129.99339

Percentage Composition: C 36.81%; H 2.32%; Cl 27.16%; N 21.46%; O 12.26%

>>Derivative: Me ether

Synonym(s): 5-Chloro-2-methoxypyrimidine

Molecular Formula: C₅H₅ClN₂O

Molecular Weight: 144.56

Accurate Mass: 144.00904

Percentage Composition: C 41.54%; H 3.49%; Cl 24.52%; N 19.38%; O 11.07%

Physical Description: Solid

Melting Point: Mp 53-54°

References:

English, J.P. *et al.*, *J.A.C.S.*, 1946, **68**, 1039, (*synth*)

Boarland, M.P.V. *et al.*, *J.C.S.*, 1952, 3722, (*uv*)

Crosby, D.G. *et al.*, *J.O.C.*, 1960, **25**, 1916, (*synth*)

Kuczera, K. *et al.*, *J. Mol. Struct.*, 1968, **140**, 235, (*ir, tautom*)

Furberg, S. *et al.*, *Acta Chem. Scand., Ser. A*, 1974, **28**, 435, (*cryst struct*)

Gacek, M. *et al.*, *Chem. Scr.*, 1979, **13**, 99, (*synth, ms, derivs*)

Gacek, M. *et al.*, *FEBS Lett.*, 1979, **98**, 355, (*activity*)