



Type of Compound Code(s): PA2000 PA4700 PA0250 PA0200

Molecular Formula: C₅H₆Cl₂N₂O₂

Molecular Weight: 197.02

Accurate Mass: 195.980632

Percentage Composition: C 30.48%; H 3.07%; Cl 35.99%; N 14.22%; O 16.24%

Use/Importance: Chlorinating agent, disinfectant, used esp. in laundry bleaches. Used as 0.25M soln. in glacial AcOH for potentiometric oxidimetric titration of As(III), Sb(III), Sn(II), Fe(II)

Physical Description: Prisms (CHCl₃)

Melting Point: Mp 132°

Solubility: Sol. H₂O; mod. sol. AcOH, EtOH

Other Data: Liberates HOCl in contact with water

Hazard & Toxicity: Attempted chlorination of xylene caused violent explosion. Severe skin irritant. LD₅₀ (rat, orl) 542 mg/kg. OES: long-term 0.2 mg m⁻³; short-term 0.4 mg m⁻³

Aldrich: 23280-7

Fluka: 35710

>>Derivative: N¹,N³-Dibromo

see 1,3-Dibromo-5,5-dimethyl-2,4-imidazolidinedione, [KHD91-R](#)

>>Derivative: N¹,N³-Diiodo

Synonym(s): 1,3-Diiodo-5,5-dimethyl-2,4-imidazolidinedione. 1,3-Diiodo-5,5-dimethylhydantoin

CAS Registry Number: 2232-12-4

Molecular Formula: C₅H₆I₂N₂O₂

Molecular Weight: 379.924

Accurate Mass: 379.851874

Percentage Composition: C 15.81%; H 1.59%; I 66.81%; N 7.37%; O 8.42%

Use/Importance: Iodinating agent for aromatic compds. and enol acetates

Rare Chemicals Library: S61254-5

>>Derivative: 1-Chloro, 3-bromo

CAS Registry Number: 126-06-7

Molecular Formula: C₅H₆BrClN₂O₂

Molecular Weight: 241.471

Accurate Mass: 239.950116

Percentage Composition: C 24.87%; H 2.50%; Br 33.09%; Cl 14.68%; N 11.60%; O 13.25%

Melting Point: Mp 160-164°

Aldrich: 27711-8

References:

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