Type of Compound Code(s): PA2000 PA4700 PA0250 PA0200
Molecular Formula: $C_5H_6Cl_2N_2O_2$
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 0.25*M* soln. in glacial AcOH for potentiometric oxidimetric titration of As(*III*), Sb(*III*), Sn(*II*), Fe(*II*)
Physical Description: Prisms ($CHCl_3$)
Melting Point: Mp 132°
Solubility: Sol. H_2O; mod. sol. AcOH, EtOH
Other Data: Liberates HOCl in contact with water
Hazard & Toxicity: Attempted chlorination of xylene caused violent explosion. Severe skin irritant. LD_{50} (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:** N^1,N^3-Dibromo
see 1,3-Dibromo-5,5-dimethyl-2,4-imidazolidinedione, KHD91-R

>>**Derivative:** N^1,N^3-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: $C_5H_6I_2N_2O_2$
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: $C_5H_6BrClN_2O_2$
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

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