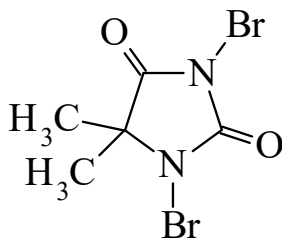




>>Entry Name: 1,3-Dibromo-5,5-dimethyl-2,4-imidazolidinedione, 9CI

Synonym(s): 1,3-Dibromo-5,5-dimethylhydantoin. Dibromantin. DDH



CAS Registry Number: 77-48-5

Molecular Formula: $C_5H_6Br_2N_2O_2$

Molecular Weight: 285.923

Accurate Mass: 283.9196

Percentage Composition: C 21.00%; H 2.12%; Br 55.89%; N 9.80%; O 11.19%

Use/Importance: Selective brominating agent. Used in detn. of alkenes. Used as 0.25M soln. in glacial AcOH for photometric detn. of As(III), Sb(III), Sn(II)

Physical Description: Powder

Melting Point: Mp 187-190°. Mp 197-199 dec.°

Solubility: Sol. AcOH, $CHCl_3$, EtOH

Hazard & Toxicity: Severe irritant

Aldrich: 15790-2

Fluka: 34140

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 808C, (ir)

Orazi, O.O. *et al.*, *CA*, 1951, **45**, 561c, (synth, use)

Okada, T. *et al.*, *CA*, 1957, **51**, 13852, (synth)

Reed, R.A., *Chem. Prod.*, 1960, **23**, 299; *CA*, **54**, 21059, (rev)

Oakes, V. *et al.*, *J.C.S.*, 1962, 4678, (use)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1967, **1**, 208; **2**, 108; **12**, 158; **15**, 112, (use)

Kopecky, K.R. *et al.*, *Can. J. Chem.*, 1975, **53**, 1103, (use)

Adam, W. *et al.*, *J.O.C.*, 1978, **43**, 1154, (use)

Radhamma, M.P. *et al.*, *Talanta*, 1983, **30**, 49, (use)

Sigma-Aldrich Library of Chemical Safety Data, 1988, **1**, 1077A

Eguchi, H. *et al.*, *Bull. Chem. Soc. Jpn.*, 1994, **67**, 1918, (use)