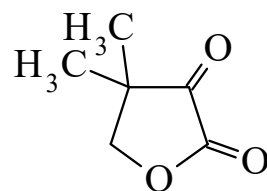




>>Entry Name: Dihydro-4,4-dimethyl-2,3-furandione, 9CI

Synonym(s): α -Keto- β,β -dimethyl- γ -butyrolactone. Ketopantolactone



CAS Registry Number: 13031-04-4

Molecular Formula: C₆H₈O₃

Molecular Weight: 128.127

Accurate Mass: 128.047345

Percentage Composition: C 56.25%; H 6.29%; O 37.46%

Use/Importance: Synthetic intermed.

Physical Description: Cryst. (Et₂O)

Melting Point: Mp 66-68° (60°)

Boiling Point: Bp₁₂ 120-125°

Aldrich: 30584-7

>>Derivative: Hydrazone

Molecular Formula: C₆H₁₀N₂O₂

Molecular Weight: 142.157

Accurate Mass: 142.074228

Percentage Composition: C 50.69%; H 7.09%; N 19.71%; O 22.51%

Physical Description: Needles (EtOH)

Melting Point: Mp 200-202°

>>Derivative: Phenylhydrazone

Physical Description: Needles (CHCl₃)

Melting Point: Mp 169-171°

>>Derivative: 2,4-Dinitrophenylhydrazone

Physical Description: Yellow cubes (AcOH)

Melting Point: Mp 242-243.5°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 1141C, (*nmr*)

Kuhn, R. *et al.*, *Ber.*, 1942, **75**, 121, (*synth*)

Lipton, S.H. *et al.*, *J.A.C.S.*, 1949, **71**, 2364, (*synth*)

Nagase, O. *et al.*, *Chem. Pharm. Bull.*, 1969, **17**, 398, (*synth, ir*)

Org. Synth., 1985, **63**, 18, (*synth*)

Hata, H. *et al.*, *Synthesis*, 1991, 289, (*synth, ir, pmr, bibl*)