



>>Entry Name: *N,N,N',N'*-Tetramethylethylenediamine, 8Cl

Synonym(s): *N,N,N',N'*-Tetramethylethanediamine, 9Cl

CAS Registry Number: 110-18-9

Me₂NCH₂CH₂NMe₂

Molecular Formula: C₆H₁₆N₂

Molecular Weight: 116.206

Accurate Mass: 116.131348

Percentage Composition: C 62.02%; H 13.88%; N 24.11%

Use/Importance: Butyllithium complex is a reactive metalating agent

Physical Description: Oil

Boiling Point: Bp 122°

Hazard & Toxicity: Skin and severe eye irritant. LD₅₀ (rat, orl) 1580 mg/kg

Aldrich: 41101-9

Fluka: 87690

Sigma: T0405

>>Derivative: Hydrochloride (1:2)

CAS Registry Number: 7677-21-6

Physical Description: Cryst. (MeOH)

Other Data: Dec. at 288°

Rare Chemicals Library: S74575-8

>>Derivative: Dipicrate

Physical Description: Cryst. (MeOH aq.)

Melting Point: Mp 257°

>>Derivative: *N,N'*-Dioxide

CAS Registry Number: 29338-41-8

Molecular Formula: C₆H₁₆N₂O₂

Molecular Weight: 148.205

Accurate Mass: 148.121178

Percentage Composition: C 48.63%; H 10.88%; N 18.90%; O 21.59%

Melting Point: Mp 139-140 dec.°

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 492B, (*nmr*)

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 305A, (*ir*)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 391A, (*ir*)

Fox, H.H. *et al.*, *J.O.C.*, 1951, **16**, 225, (*synth*)

Grail, G.F. *et al.*, *J.A.C.S.*, 1952, **74**, 1313, (*synth*)

Evans, R.F., *Chem. Ind. (London)*, 1959, 729, (*synth*)

Gurien, H., *J.O.C.*, 1963, **28**, 878, (*synth*)

Schwetlick, K. *et al.*, *J. Prakt. Chem.*, 1964, **25**, 95, (*synth*)

Boehme, H. *et al.*, *Chem. Ber.*, 1966, **99**, 2842, (*synth*)

Lichter, R.L. *et al.*, *J.A.C.S.*, 1972, **94**, 2495, (*N-15 nmr*)

Vatlina, L.P. *et al.*, *Zh. Org. Khim.*, 1972, **8**, 459, (*ms*)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1979, **7**, 358

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, TDQ750