



>>Entry Name: Tetramethylurea

Synonym(s): TMU. Temur

CAS Registry Number: 632-22-4

Me₂NCONMe₂

Molecular Formula: C₅H₁₂N₂O

Molecular Weight: 116.163

Accurate Mass: 116.094963

Percentage Composition: C 51.70%; H 10.41%; N 24.12%; O 13.77%

Use/Importance: Solv. with similar solvent props. to pyridine

Physical Description: Liq. with faint pleasant odour

Melting Point: Mp -1°

Boiling Point: Bp 176.5°

Solubility: Sol. H₂O

Density: d₄²⁰ 0.969

Refractive Index: n_D²⁵ 1.4493

Hazard & Toxicity: Contact with eyes may cause conjunctivitis, or temporary opacity of the cornea. LD₅₀ (mus, orl) 2920 mg/kg. Exp. reprod. and teratogenic effects

Aldrich: T2450-3

Fluka: 87850

Sigma: T3875

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 804A, (ir)

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Aldrich Library of NMR Spectra, 2nd edn., 1983, **1**, 673D, (nmr)

Michler, W. *et al.*, *Ber.*, 1879, **12**, 1162, (synth)

Lüttringhaus, A. *et al.*, *Angew. Chem., Int. Ed.*, 1964, **3**, 260, (rev)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1967, **1**, 1146

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn.*, Van Nostrand Reinhold, 1992, TDX250

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