



>>Entry Name: Propanedinitrile, 9CI

Synonym(s): Malononitrile, 8CI. Dicyanomethane

CAS Registry Number: 109-77-3

Related CAS Registry Numbers(s): 20334-42-3

$\text{H}_2\text{C}(\text{CN})_2$

Molecular Formula: $\text{C}_3\text{H}_2\text{N}_2$

Molecular Weight: 66.062

Accurate Mass: 66.021798

Percentage Composition: C 54.54%; H 3.05%; N 42.40%

Physical Description: Cryst.

Melting Point: Mp 30-30.5°

Boiling Point: Bp 218-219°. Bp₂₀ 109°. Bp₁₁ 99°

Solubility: Sol. H_2O , EtOH, Et₂O, C₆H₆

pKa Value: pK_{a1} 11.2 (25°)

Hazard & Toxicity: May polymerise violently on heating or with strong base. Severe eye irritant. LD₅₀ (rat, orl) 60.8 mg/kg. LD₅₀ (rat, skn) 350 mg/kg

Aldrich: M140-7

Fluka: 63390

Sigma: M1903

Supelco: 44-2637

References:

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Savoie, R. *et al.*, *Can. J. Chem.*, 1976, **54**, 3293, (nmr, ir)

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