



>>Entry Name: Tri(2-propenyl)amine

Synonym(s): *N,N*-Di-2-propenyl-2-propen-1-amine, 9CI. Triallylamine, 8CI

CAS Registry Number: 102-70-5

Related CAS Registry Numbers(s): 13107-09-0

(H₂C=CHCH₂)₃N

Molecular Formula: C₉H₁₅N

Molecular Weight: 137.224

Accurate Mass: 137.120449

Percentage Composition: C 78.78%; H 11.02%; N 10.21%

Use/Importance: Crosslinking comonomer

Physical Description: Oily liq. with unpleasant odour

Melting Point: Mp -70°

Boiling Point: Bp 155-156°

Solubility: Sol. EtOH, Et₂O, Me₂CO, C₆H₆

Density: d₄¹⁴0.81

pKa Value: pK_a 8.31 (20°)

Refractive Index: n_D²⁰ 1.4510

Other Data: Hydrochloride undergoes radical cyclopolym.

Hazard & Toxicity: Eye and severe skin irritant. Prolonged or repeated exposure can damage trachea and bronchi. LD₅₀ (rat, orl) 1030 mg/kg. LD₅₀ (rbt, skn) 400 mg/kg

Aldrich: T4500-4

Rare Chemicals Library: S37084-3

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 520B, (*nmr*)

Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 412A, (*ir*)

Aldrich Library of Infrared Spectra, 3rd edn., 1981, 189B, (*ir*)

Sadtler Standard C-13 NMR Spectra, 5223, (*cmr*)

Butler, G.B. *et al.*, *J. Chem. Educ.*, 1951, **28**, 191, (*synth*)

Verma, A.L., *J. Mol. Struct.*, 1972, **11**, 241, (*ir, Raman*)

McLean, C.D. *et al.*, *J. Macromol. Sci., Chem., Part A*, 1976, **10**, 851, (*polym, hydrochloride*)

Dmitrieva, Z.T. *et al.*, *Zh. Strukt. Khim.*, 1977, **18**, 708; *J. Struct. Chem. (Engl. Transl.)*, 1977, **18**, 562, (*ir, pmr*)

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