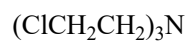




**>>Entry Name: Tris(2-chloroethyl)amine**

**Synonym(s):** 2-Chloro-*N,N*-bis(2-chloroethyl)ethanamine, 9Cl. 2,2',2''-Trichlorotriethylamine, 8Cl. Trimustine, BAN. **Trichlormethine**, INN. Nitrogen Lost. NSC 30211

**CAS Registry Number:** 555-77-1



**Molecular Formula:** C<sub>6</sub>H<sub>12</sub>Cl<sub>3</sub>N

**Molecular Weight:** 204.526

**Accurate Mass:** 203.00353

**Percentage Composition:** C 35.24%; H 5.91%; Cl 52.00%; N 6.85%

**Use/Importance:** Chemical warfare agent, biological alkylating agent with mutagenic and cytotoxic activity. Antineoplastic agent

**Physical Description:** Mobile liq. with faint odour of fish and soap

**Boiling Point:** Bp<sub>2</sub> 98°

**Refractive Index:** n<sub>D</sub><sup>25</sup> 1.4925

**Calculated Log P Data:** Log P 1.66 (calc)

**Hazard & Toxicity:** Eye irritant, vesicant. LD<sub>50</sub> (rat, orl) 5 mg/kg. LD<sub>50</sub> (rat, skn) 2 mg/kg. Exp. carcinogen

**>>Derivative:** Hydrochloride

**Synonym(s):** Lekamin. Trillekamin. Trimitan. SK 100. TS 160

**CAS Registry Number:** 817-09-4

**Physical Description:** Cryst. (EtOH/Me<sub>2</sub>CO)

**Melting Point:** Mp 131-132.2°

**Hazard & Toxicity:** Adverse systemic effects reported when used therapeutically. LD<sub>50</sub> (rat, ipr) 0.75 mg/kg. Exp. carcinogen. Exp. reprod. effects

**Aldrich:** T8530-8

**>>Derivative:** *N*-Oxide

**Molecular Formula:** C<sub>6</sub>H<sub>12</sub>Cl<sub>3</sub>NO

**Molecular Weight:** 220.525

**Accurate Mass:** 218.998445

**Percentage Composition:** C 32.68%; H 5.48%; Cl 48.23%; N 6.35%; O 7.26%

**Physical Description:** Cryst. (Me<sub>2</sub>CO) (as hydrochloride)

**Melting Point:** Mp 91-92° (hydrochloride)

**References:**

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Ward, K., *J.A.C.S.*, 1935, **57**, 914, (*synth*)

Wilson, E. *et al.*, *J.A.C.S.*, 1951, **73**, 3635, (*synth*)

Kimura, E. *et al.*, *Inorg. Chem.*, 1970, **9**, 1183, (*synth*)

*IARC Monog.*, 1975, **9**, 229; *Suppl.* 7, 73, (*rev*, *tox*)

*Martindale, The Extra Pharmacopoeia*, 28th/29th edn., *Pharmaceutical Press*, 1982, 1874

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