



>>Entry Name: **2-Amino-2-(hydroxymethyl)-1,3-propanediol, 9Cl**

Synonym(s): Trimethylolaminomethane. Tris(hydroxymethyl)aminomethane. Aminotris(hydroxymethyl)methane. **Tromethamine**, USAN. Trometamol, BAN, INN, JAN. Trisamine. Tris buffer. Talatrol. THAM. NSC 6365. Trigmo base. Triladyl. Many other names

CAS Registry Number: 77-86-1

Related CAS Registry Numbers(s): 85169-32-0

$\text{H}_2\text{NC}(\text{CH}_2\text{OH})_3$

Molecular Formula: $\text{C}_4\text{H}_{11}\text{NO}_3$

Molecular Weight: 121.136

Accurate Mass: 121.073894

Percentage Composition: C 39.66%; H 9.15%; N 11.56%; O 39.62%

Use/Importance: Used in the synth. of surfactants, vulcanisation accelerators and pharmaceuticals. Also a titrimetric standard, emulsifying agent and absorbent for acidic gases. Alkaliser and osmotic diuretic. Buffer component, acidimetric standard. Low acute toxicity

Physical Description: Cryst. mass

Melting Point: Mp 171-172°

Boiling Point: Bp₁₀ 219-220°

Solubility: Sol. H₂O, EtOH; insol. Et₂O

pKa Value: pK_a 8.08 (25°)

Calculated Log P Data: Log P -2.91 (calc)

Hazard & Toxicity: Irritant

Aldrich: 25285-9

Fluka: 93286

Rare Chemicals Library: S28091-7

Sigma: T4140

>>Derivative: Hydrochloride

CAS Registry Number: 1185-53-1

Physical Description: Cryst.

Melting Point: Mp 150-152 dec.°

Aldrich: 85764-5

Fluka: 93287

Sigma: E7767

>>Derivative: *N*-Me

CAS Registry Number: 74178-02-2

Molecular Formula: $\text{C}_5\text{H}_{13}\text{NO}_3$

Molecular Weight: 135.163

Accurate Mass: 135.089544

Percentage Composition: C 44.43%; H 9.69%; N 10.36%; O 35.51%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 160°. Mp 207°

>>Derivative: *N*-Di-Me

CAS Registry Number: 1112-24-9

Molecular Formula: $\text{C}_6\text{H}_{15}\text{NO}_3$

Molecular Weight: 149.189

Accurate Mass: 149.105194

Percentage Composition: C 48.31%; H 10.13%; N 9.39%; O 32.17%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 156°

References: