

Specification Sheet

93352 Sigma-Aldrich

Trizma® base

≥99.0% (T)

Synonym: 2-Amino-2-(hydroxymethyl)-1,3-propanediol, THAM, Tris base, Tris(hydroxymethyl)aminomethane, Trometamol

- CAS Number [77-86-1](#)
- Linear Formula $\text{NH}_2\text{C}(\text{CH}_2\text{OH})_3$
- Molecular Weight 121.14
- Beilstein/REAXYS Number 741883
- EC Number [201-064-4](#)
- MDL number [MFCD00004679](#)
- PubChem Substance ID [329770229](#)
- NACRES NA.25



SKU-Pack Size	Availability	Pack Size	Price (SGD)	Quantity
93352-100G	Available to ship on 15.04.2021 - FROM	100 g		<input type="text" value="0"/>
93352-500G	Available to ship on 15.04.2021 - FROM	500 g		<input type="text" value="0"/>
93352-1KG	Estimated to ship on 28.04.2021 - FROM	1 kg		<input type="text" value="0"/>

Properties

description	aminopeptidase substrate
product line	BioChemika
assay	≥99.0% (T)
form	crystalline



loss	≤1% loss on drying, 110 °C
pH	10.5-12.0(4 m in water, 25 °C)
useful pH range	7 - 9
pKa (25 °C)	8.1
bp	219-220 °C/10 mmHg (lit.)
mp	167-172 °C (lit.)
	168-172 °C
solubility	H ₂ O: 1 M at 20 °C, clear, colorless
anion traces	chloride (Cl ⁻): ≤50 mg/kg
	sulfate (SO ₄ ²⁻): ≤50 mg/kg
cation traces	Ca: ≤10 mg/kg
	Cd: ≤5 mg/kg
	Co: ≤5 mg/kg
	Cr: ≤5 mg/kg
	Cu: ≤5 mg/kg
	Fe: ≤5 mg/kg
	K: ≤50 mg/kg
	Mg: ≤5 mg/kg
	Mn: ≤5 mg/kg
	Na: ≤50 mg/kg
	Ni: ≤5 mg/kg
	Pb: ≤5 mg/kg
	Zn: ≤5 mg/kg
storage temp.	room temp



SMILES string	NC(CO)(CO)CO
InChI	1S/C4H11NO3/c5-4(1-6,2-7)3-8/h6-8H,1-3,5H2
InChI key	LENZDBCJOHFCAS-UHFFFAOYSA-N

Description

General description

Tris is an established basimetric standard and buffer used in biochemistry and molecular biology.^[5] It may be used by itself as a buffer or as a component of mixed buffer formulations, such as Tris-EDTA (TE) buffer, Tris-acetate-EDTA (TAE) buffer, Tris-borate-EDTA (TBE) buffer, etc.^[6] It is pure, essentially stable, relatively non-hygroscopic and has a high equivalent weight.^[7]

Application

Trizma® base was used as buffer for the following studies:

- Electrophoretic transfer for the specific identification of isozymes of starch debranching enzyme, α -amylase and 9-amylase.^[3]
- Electrophoretic separation of lipoproteins in polyacrylamide gels.^[4]
- Preparation of TRIS buffer having pH 8.^[2]

It may be used to compose DN buffer for DNA nick-end labeling of tissue sections.^[1]

Other Notes

The pH values of all buffers are temperature- and concentration-dependent. For Tris buffers, pH increases about 0.03 unit per °C decrease in temperature, and decreases 0.03-0.05 unit per ten-fold dilution.

For precise applications, use a carefully calibrated pH meter with a glass/calomel combination electrode.

Legal Information

Trizma is a registered trademark of Sigma-Aldrich Co. LLC

