**TRIZMA® base**

**SigmaUltra**

**Product Number** T 6791

**Store at Room Temperature**

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**Product Description**

Molecular Formula: \(C_4H_{11}NO_3\)

Molecular Weight: 121.1

CAS Number: 77-86-1

\(pK_a(20 \,^\circ C)\): 8.3

Melting Point: 171-172 \(^\circ C\)

Synonyms: 2-Amino-2-(hydroxymethyl)-1,3-propanediol, tris(hydroxyamino)methane, THAM, Tris base, Trometamol

TRIZMA is the registered trademark for tris(hydroxymethyl)aminomethane, commonly called Tris. Trace elemental analyses have been performed on the SigmaUltra TRIZMA. The Certificate of Analysis provides lot-specific results. SigmaUltra TRIZMA is for applications which require tight control of elemental content.

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Sigma Technical Bulletin 106B contains additional information on temperature and concentration effects, and on the use of pH electrodes with TRIZMA buffers.

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Tris has been utilized in studies of double stranded complexes of peptide nucleic acids (PNA) and their complementary DNA sequences, by use of anion exchange HPLC. The use of Tris in capillary electrochromatography and UV analysis of tocopherols and tocotrienols has been reported.

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**Precautions and Disclaimer**

For Laboratory Use Only. Not for drug, household or other uses.

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**Preparation Instructions**

This product is soluble in water (666 mg/ml), yielding a clear, colorless solution.

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**Storage/Stability**

TRIZMA solutions can be autoclaved. Tris has a significant temperature coefficient:

- From 5 \(^\circ C\) to 25 \(^\circ C\), the pH decreases an average of 0.03 pH units per \(\degree C\).
- From 25 \(^\circ C\) to 37 \(^\circ C\), the pH decreases an average of 0.025 pH units per \(\degree C\).

When preparing Tris solutions at a given pH and temperature, it is necessary to choose the proper mixture to give the desired final pH at the desired temperature.

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**References**


TRIZMA is a registered trademark of Sigma-Aldrich Biotechnology.

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