

TRIS

HIGH ASSAY, USP, GMP

CAS #: 77-86-1

 Formula: $\text{NH}_2\text{C}(\text{CH}_2\text{OH})_3$

F.W.: 121.14 g/mol

TRIS-4223

BIO PHARMA GRADE

ANALYSIS	SPECIFICATIONS	
Absorbance (1M)	260 nm 280 nm 430 nm	< = 0.06 a.u. < = 0.06 a.u. < = 0.01 a.u.
Absorbance (10%)	260 nm 280 nm 430 nm	< = 0.03 a.u. < = 0.02 a.u. < = 0.004 a.u.
Absorbance (40%)	290 nm	< = 0.20 a.u.
APHA Color (20% Solution)		< = 20 APHA
Assay, Dried Basis (USP)		99.0 - 101.0%
Assay, Dried Basis (Ultrapure)		> = 99.9%
Chloride		< = 20 ppm
Endotoxin		< = 2.5 EU/g
Enzymes	DNase Protease RNase	None Detected None Detected None Detected
Identification A, IR (USP)		Conforms to Reference Standard
Identification B (USP)		Passes Test
Identification C (USP)		Passes Test
Insoluble Matter		< = 0.005%
Loss on Drying (USP)		< = 0.3%
Melting Range (USP)		168 - 172°C
Microbial Content	TAMC TYMC	< = 100 CFU/g < = 100 CFU/g
pH (5%) (USP)		10.0 - 11.5
Related Substances		< = 0.1%
Residue on Ignition (USP)		< = 0.05%
Trace Metals	Aluminum (Al) Arsenic (As) Barium (Ba) Bismuth (Bi) Cadmium (Cd) Calcium (Ca) Chromium (Cr) Cobalt (Co) Copper (Cu) Iron (Fe) Lead (Pb) Lithium (Li) Magnesium (Mg) Manganese (Mn) Molybdenum (Mo) Nickel (Ni) Potassium (K) Sodium (Na) Zinc (Zn)	< = 5 ppm < = 1.6 ppm < = 5 ppm < = 5 ppm < = 5 ppm < = 1 ppm < = 5 ppm < = 5 ppm < = 1 ppm < = 1 ppm < = 5 ppm < = 50 ppm < = 50 ppm < = 1 ppm
Water, KF		< = 1.0%

General Product Overview

This is a high purity, reagent grade product, purified under cGMP conditions. It is used when high purity, high assay, GMP grade Tromethamine is required. Tris is considered a Good's buffer because it has low UV absorptivity, minimum reactivity, stable pH and is soluble in water.

Industry Application

Suitable for use in biological and biotech chemical process applications from R&D through scale cGMP production.

Key Product Features

- Appears as a white crystalline product
- Manufactured in accordance with IPEC
- Manufactured in an enzyme free, hormone free and animal free environment
- Contains no known major food allergens (as defined by FDA and WHO)
- The final product and its raw materials are not derived from nor come into contact with animal parts, animal products, and/or animal byproducts or derivatives.
- Is not subject to genetic modification
- Synonyms: Tris(hydroxymethyl) aminomethane; Trometamol; THAM; Trisaminol; Tromethamine

Storage and Shipping Conditions

Refer to SDS.

Standard Shelf-Life Policy

Unless otherwise noted on the Shelf-Life Statement and CoA, this product has a 2-year retest date supported by a 3-year ICH Q1 Stability Study (if one is completed).

Package Sizes

100g, 500g, 1kg, 5kg, 10kg, 25kg, 50kg

[Click here to view SDS, CoAs and other supporting regulatory documents on our website.](#)

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