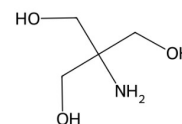


CERTIFICATE OF ANALYSIS

Standard product specification

Tris Buffer (Tromethamine)

CAS 77-86-1 · C₄H₁₁NO₃ · ≥99.8% Biotech/USP


STRUCTURAL FORMULA

1. PRODUCT IDENTITY

Product name	Tris Buffer (Tromethamine)
C.A.S. number	77-86-1
Molecular formula	C ₄ H ₁₁ NO ₃
Molecular weight	121.14 g/mol
Grade / standard	≥99.8% Biotech/USP
Description	White crystalline powder
Product group	Biological Buffers
Category	Laboratory & Analytical Reagents
Country of origin	India
Packing	Bags, drums, carboys, IBC or ISO tank as applicable — customer-specified packing available
Storage	Cool, dry, well-ventilated place in tightly closed original packing

2. ANALYTICAL SPECIFICATION

S. NO.	TEST PARAMETER	SPECIFICATION	TYPICAL RESULT	METHOD
1	Description	White crystalline powder	Complies	Visual
2	Identification (A) — Infrared absorption	Concordant with reference spectrum	Complies	IR Spectrophotometry
3	Identification (B) — Chemical / chromatographic	Positive for the substance	Complies	As per monograph
4	Solubility	As per specification	Complies	Visual / Monograph

5	Assay	Not less than 99.8 % w/w	99.90	HPLC / Titrimetry (Monograph)
6	Matter Insoluble in Water	Not more than 0.01 % w/w	0.0038	Gravimetry
7	pH (5 % aqueous solution)	As per specification	9.6	Potentiometry
8	Chloride (Cl)	Not more than 0.001 %	0.00023	Turbidimetry
9	Sulphate (SO ₄)	Not more than 0.002 %	0.00033	Turbidimetry
10	Iron (Fe)	Not more than 5 ppm	1.37 ppm	ICP-OES
11	Heavy Metals (as Pb)	Not more than 5 ppm	Less than 2 ppm	ICP-OES
12	Loss on Drying	Not more than 1.0 % w/w	0.18	Gravimetry (Monograph)
13	Sulphated Ash / Residue on Ignition	Not more than 0.1 % w/w	0.036	Gravimetry (Monograph)
14	Related Substances — any individual impurity	Not more than 0.10 %	0.011	HPLC
15	Related Substances — total impurities	Not more than 0.50 %	0.170	HPLC
16	Residual Solvents	Complies with ICH Q3C limits	Complies	Headspace GC

3. DECLARATION

This document sets out the standard specification for Tris Buffer (Tromethamine) and applies to all consignments of this product and grade supplied by Scapex Exports Pvt. Ltd. It is not a lot-specific release document; a lot-specific certificate carrying the analysis of the material actually shipped is issued with, and travels with, each consignment. Scapex Exports supplies against customer-specified assay limits and pharmacopoeial standards — send your specification sheet and we confirm compliance in writing before the order is accepted.

