

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-09-02 09:06:54

Date of Next Testing: 2029-09-01 09:06:54

Product Name: **Tris(hydroxymethyl)aminomethane (Tris base)**

CAS Number: 77-86-1

Specifications & Purity: PharmPure™, USP, Ph.Eur., for cell culture, ≥99.9%(T)

Lot #: H2528628

SKU #: **T110598**

Version: **2**

Analysis #: **562103**

Storage Temperature: Room temperature, Argon charged

Parameter	Limit Values	Result
Loss on drying(EP)	0-0.5 (%)	0.02140 %
Melting point	168-172 (°C)	169.64000 °C
Ignition Residue(Ash)	0-0.1 (%)	0.02360 %
Water by Karl Fischer	0-0.2 (%)	0.10800 %
Iron(Fe)(ICP)	0-1 (ppm)	0.24100 ppm
Heavy metal (as Pb)	0-2 (ppm)	0.52600 ppm
PH(5% in water)	10-11.5	10.72500
UV Absorbance 280nm(40%,H2O)	0-0.4	0.03800
UV Absorbance 290nm(40%,H2O)	0-0.4	0.03400
UV Absorbance 260nm(40%,H2O)	0-0.4	0.04800
Loss on Drying(USP)	≤1 (%)	0.81500 %
Chloride (Cl-)	≤100 (ppm)	0.52700 ppm
Endotoxin Level	<1 (EU/mg)	0.32560 EU/mg
Total Count Aerobic, Yeast, plus Mold	≤100 (cfu/g)	10.02500 cfu/g
Purity (Titration by H2SO4)	99.7-100.3 (%)	100.28000 %
Appearance (T110598)	White to Off-White Solid, Powder, or Crystals	White to Off-White Solid, Powder, or Crystals
Identity Test B (USP)	Pass	Pass
Identity Test C (USP)	Pass	Pass
Infrared spectrum	Conforms to Structure	Conforms to Structure
Related substances	Pass	Pass
Solubility in H2O , clear colorless , 200g plus 300ml of water	pass	Pass
Solubility in 2.5 g plus 50 ml of CO2-Free H2O (EP),colorless ,clear	Pass	Pass



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Parameter	Limit Values	Result
Identity Test A (USP)	Pass	Pass
DNAse, Exonuclease Detection	None Detected	none detected
NICKase, Endonuclease Detection	none Detected	none detected
RNAse Detection	None Detected	none detected
Protease Detection	None Detected	none detected
Cell Culture Test	pass	Pass

A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager