

BIOBUFFER SOLUTIONS

100 Majestic Way, Bangor, PA 18013 / www.biospectra.us

Effective Date:	12-Feb-2026	12-Feb-2029	: Date of Next Review
Prepared By:	Amy Yenko	Not Applicable	: Supersedes
QA/QC Approval:	Krista Rehrig	Hannah Kuchmas	: Management Approval
Reason for Revision:	See Revision History in MasterControl.		

CERTIFICATE OF ANALYSIS

TRIS

BIO QUALIFIED GRADE / TRIS-6201

LOT: TRIS-L02-0226-0024

$\text{NH}_2\text{C}(\text{CH}_2\text{OH})_3$ ★ F.W. 121.14 g/mol. ★ CAS# 77-86-1

Manufacturing Date: 02/25/26 Retest Date: 02/29/28

Packaging Site: 100 Majestic Way, Bangor PA, 18013

Meets USP, EP Specifications

ANALYSIS	SPECIFICATION	TEST RESULT
Appearance of Solution (EP)	Passes Test	Passes Test
Assay, Dried Basis (USP/EP)	99.0 - 100.5 %	100.1 %
Chloride (EP)	< = 100 ppm	< 100 ppm
Identification, IR (USP-A/EP-C)	Conforms to Reference Standard	Passes Test
Identification A (EP), pH (5%) (USP/EP)	10.0 – 11.5	11.0
Identification B (USP)	Passes Test	Passes Test
Identification B (EP), Melting Range (USP)	168 - 172°C	171-172 °C
Identification C (USP)	Passes Test	Passes Test
Identification D (EP)	Conforms to Reference Standard	Passes Test
Iron (EP)	< = 10 ppm	< = 1 ppm
Loss on Drying (USP/EP)	< = 0.5 %	< 0.5 %
Related Substances (EP)	< = 1.0 %	< 0.03 %
Residue on Ignition/Sulfated Ash (USP/EP)	< = 0.1%	< 0.1 %

COUNTRY OF ORIGIN: China

TEST METHOD REFERENCE: DCN: BSI-ATM-0007

MANUFACTURING DATE: The manufacturing date is representative of the final packaging date at BioSpectra.

INTENDED USE: Material represented by this Certificate of Analysis is suitable for use as a process chemical. It is manufactured in accordance with the ISO Certified Quality Management System. The material represented by this Certificate of Analysis is not suitable to be used as an Active Pharmaceutical Ingredient, Drug, Drug Product or Household Item.

Prepared by: Anil McAll Date: 3/3/26 Job Title: QA Tech III

Reviewed by: James Anglin Date: 3/3/26 Job Title: QA Supervisor