



## Certificate of Analysis

### Tris Base USP

**Catalog Number:** TR1001  
**Lot Number:** 0426801  
**CAS Number:** 77-86-1  
**Molecular Formula:**  $C_4H_{11}NO_3$   
**Molecular Weight:** 121.14  
**Storage:** 15°C – 30°C  
**Date of Manufacture:** February 27, 2018  
**Retest Date:** May 3, 2020

Test	Specification	Result
Appearance	White crystalline powder	Conforms
Assay (on dried basis)	99.0 – 101.0%	100.2%
Identification		
A (FTIR)	To match spectra	Conforms
B Color Reaction	To pass test	Conforms
C Color Reaction	To pass test	Conforms
Melting Point	168°C to 172°C	171.6°C – 171.9°C
Moisture (LOD)	≤ 1.0%	< 0.3%
pH (5% in H <sub>2</sub> O)	10.0 to 11.5	10.57
Residue on Ignition	≤ 0.1%	0.00%
Heavy metals (as Pb)	≤ 10ppm	< 1ppm

Approved by:

Date: June 22, 2018

John Grubb, PhD  
Gojira Fine Chemicals, LLC  
Quality Manager  
Tel: 440-539-7033 Fax: 888-211-5523  
[john@gojiraafc.com](mailto:john@gojiraafc.com)