

## Certificate of Analysis

Date of Testing: 2023-05-26 15:15:27  
Date of Next Testing: 2026-05-25 15:15:27  
Product Name: **Tris base**  
CAS Number: 77-86-1  
Specifications & Purity:  $\geq 99\%$  (titration), crystalline  
Lot #: E23231198  
SKU #: **T434093**  
Analysis: **222599**

Parameter	Limit Values	Result
Water by Karl Fischer	0-0.5 (%)	0.15 %
UV Absorbance 290nm(40%,H2O)	0-0.4	0.04
Purity (Titration by H2SO4)	99-102.5 (%)	100.12 %
ICP-MS (Total metallic impurity)	$\leq 5$ (ppm)	4.00000 ppm
Appearance(T434093)	White to Off White Crystalline or Powder	White to off white crystalline or powder
Solubility in H2O ,Clear Colorless to Faint Yellow,200g plus 300ml of water	pass	Pass
NMR Spectrum 1H	Conforms to Structure	Conforms to Structure



John Su  
QA & QC Manager