

## Certificate of Analysis

Date of Testing: 2023-08-31 13:53:18  
Date of Next Testing: 2027-08-30 13:53:18  
Product Name: **Tris(hydroxymethyl)aminomethane**  
CAS Number: 77-86-1  
Specifications & Purity: Primary Standard and Buffer,  $\geq 99.9\%$  (titration)  
Lot #: H2312198  
SKU #: **T110599**  
**Analysis:** **270158**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Heavy metal (as Pb)	0-2 (ppm)	0.18 ppm
Iron(Fe)	0-1 (ppm)	0.06 ppm
Water by Karl Fischer	0-0.2 (%)	0.15 %
Melting point	168-172 (°C)	171.77000 °C
Purity (Titration by H <sub>2</sub> SO <sub>4</sub> )	99.7-100.3 (%)	99.76 %
UV Absorbance 290nm(40%,H <sub>2</sub> O)	0-0.5	0.03
Appearance (T110599)	White crystalline powder, Crystals, Granules and/or Chunks	White crystalline powder, Crystals, Granules and/or Chunks
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H <sub>2</sub> O, clear colorless, 200g pass plus 300ml of water		Pass



John Su  
QA & QC Manager