

## Certificate of Analysis

Date of Testing: 2024-06-14 11:01:28  
Date of Next Testing: 2028-06-13 11:01:28  
Product Name: **Tris(hydroxymethyl)aminomethane hydrochloride**  
CAS Number: 1185-53-1  
Specifications & Purity: reagent grade,  $\geq 99\%$   
Lot #: F2411462  
SKU #: **T105287**  
Version: **0**  
Analysis #: **361004**  
Storage Temperature: Argon charged

Parameter	Limit Values	Result
Purity (Titration by NaOH)	99-100 (%)	99.79%
Heavy metal (as Pb)	0-5 (ppm)	0.00 ppm
Water by Karl Fischer	0-1 (%)	0.24%
Appearance (T105287)	white crystalline powder	white crystalline powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility, Colorless, Clear, 200 g plus 300 ml of H <sub>2</sub> O	pass	Pass



John Su  
QA & QC Manager