

CERTIFICATE of ANALYSIS

PRODUCT: **TRIS UltraPure USP/EP Grade**
 [Tris(hydroxymethyl) aminomethane]
 $C_4H_{11}NO_3$; M.W. 121.1; CAS# [77-86-1]

PRODUCT NUMBER: T-1178

LOT NUMBER: J1031

	<u>SPECIFICATIONS:</u>	<u>RESULTS:</u>
APPEARANCE:	White crystalline powder	pass
PURITY (dried basis by GC):	≥ 99.9%	99.99%
ASSAY (dried basis):	99.9 – 100.1%	100.0%
MOISTURE (KF):	≤ 0.1%	< 0.1%
MELTING POINT:	170.0 – 172.0°C	170.6°C
SOLUBILITY (2M in H₂O):	Clear and colorless	pass
ABSORBANCE		
@ 280nm, 1M in H ₂ O:	≤ 0.02	0.01
ABSORBANCE		
@ 290nm, 40% solution in H ₂ O:	≤ 0.20	0.02
pH		
1.0M Aqueous solution @25°C:	10.5 – 11.5	11.1
pH		
5% solution in H ₂ O @25°C:	10.0 – 11.5	10.7
IDENTIFICATION A:	-----	pass
IDENTIFICATION B:	-----	pass
IDENTIFICATION C:	-----	pass

CONFORMS to USP/EP Grade Specifications.

STORAGE & HANDLING:

Store desiccated at RT. **WARNING: IRRITANT!**

CAUTION: For laboratory research & scientific manufacturing use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

Verified: EV