



CERTIFICATE OF ANALYSIS

Product	L-Threonine
Grade	USP (meet USP32)
Product Code	TB0919 (DE919)
Formula	C ₄ H ₉ NO ₃
MW	119.1
CAS#	72-19-5
Lot No	

Test Items	Specifications	Results
Appearance	White crystalline or powder	
Purity	98.5-101.5%	
Identification (IR)	Concordant with the reference spectrum	
pH	5.0 ~ 6.5	
Specific rotation	-26.7° ~ -29.1°	
Chloride	≤0.05%	
Sulfate	≤0.03%	
Iron	≤30ppm	
Heavy metals	≤15ppm	
Loss on drying	≤0.20%	
Residue on ignition	≤0.4%	
Chromatographic purity	Individual impurity ≤0.5% Total impurity ≤2.0%	

Storage: 18~25°C.