



Specification

L-Tyrosine USP

Catalog Number:	TS1002
CAS Number:	60-18-4
Synonym(s):	(S)-2-Amino-3-(4-hydroxyphenyl)propionic acid, 3-(4-Hydroxyphenyl)-L-alanine
Molecular Formula:	C ₉ H ₁₁ NO ₃
Molecular Weight:	181.19
Storage:	15°C – 30°C
Retest Period:	Two years from the date of manufacture

Test	Specification
Appearance	White powder
Purity (Titration) ¹	98.5 – 101.5%
Identification (FTIR) ¹	To match reference spectra
Specific Rotation ¹	-11.2° to -9.8°
Moisture (LOD) ¹	≤ 0.3%
Residue on Ignition ¹	≤ 0.4%
Chloride ¹	≤ 0.04%
Sulfate ¹	≤ 0.04%
Heavy Metals ¹	≤ 15ppm
Arsenic	≤ 1ppm
Cadmium	≤ 1ppm
Iron ¹	≤ 30ppm
Lead	≤ 1ppm
Mercury	≤ 0.1ppm
Related Compounds ¹	
Individual Impurities	≤ 0.5%
Total Impurities	≤ 2.0%
Total Plate Count	≤ 1,000cfu/g
Yeast & Mold	≤ 100cfu/g
Coliform	Negative/g
<i>E. coli</i>	Negative
<i>Salmonella</i>	Negative
<i>S. aureus</i>	Negative
Particle Size	≥ 98% thru 100mesh
Bulk Density	≥ 0.2mg/mL min
Tap Density	≥ 0.3mg/mL min
Lots meet the specifications for USP39.	

Approved:

Date: September 11, 2018



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