



无锡金海岸生物科技有限公司

WUXI JIN-HIGHER BIOTECH CO.,LTD

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CERTIFICATE OF ANALYSIS

PRODUCT NAME: L-SERINE

CAS NO:56-45-1

BATCH NO: LK\*\*\*\*\*

SHELF LIFE: 2YEARS

PRODUCTION DATE:

REPORT DATE:

STANDARD: USP32

QUANTITY:1000KGS

Tests	Limits	Test results	Test method
Description	White crystals or crystalline powder	Conforms	Visual Method
Identification (IR)	Concordant with the reference spectrum	Conforms	USP<197K>
Specific rotation $[\alpha]_D^{25}$	+14.0° ~ +15.6°	+14.9°	USP<781S>
Assay	98.5~101.5%	99.5%	TLC
Loss on drying	≤0.20%	0.08%	USP<731>
Residue on	≤0.10%	0.06%	USP<281>
Chloride(Cl)	≤0.05%	<0.05%	USP<221>
Sulfate(SO <sub>4</sub> )	≤0.03%	<0.03%	USP<221>
Iron(Fe)	≤30ppm	<30ppm	USP<241>
Heavy metals(Pb)	≤15ppm	<15ppm	USP<231>
Arsenic(As)	≤1ppm	<1ppm	USP<211>
Lead	≤ 3ppm	<3ppm	USP<251>
Mercury	≤0.1ppm	<0.1ppm	USP<261>
Chromatographic	Conforms	Conforms	USP<621>
Organic volatile impurities	Meets the requirements	Conforms	USP<467>
Total plate count	≤1000cfu/g	<1000cfu/g	USP<61>
Molds and Yeasts	≤100cfu/g	<100cfu/g	USP<61>
Escherichia Coli	Negative	Negative	USP<62>
Salmonella enteritica	Negative	Negative	USP<62>
Conclusion: Passed test according to the Standard of USP32.			

Inspector:Guoqin Zou

Checker: Fengzhu Xu

Director:Deming Cao

