

## CERTIFICATE OF ANALYSIS

### L-LEUCINE

Item	Specification
Appearance	White powder
Loss on Drying	≤0.2%
Residue on Ignition	≤0.4%
Specific optical rotation $[\alpha]_D^{20}$	+14.9°~+17.3°
Chloride(Cl)	≤0.05%
Sulfate(SO <sub>4</sub> )	≤0.03%
Iron (Fe)	≤30ppm
Heavy metals	≤10ppm
Lead	≤3 ppm
Mercury	≤0.1 ppm
Cadmium	≤ 1 ppm
Arsenic(As)	≤0.2 ppm
Assay	98.5%~101.5%
PH	5.5~7.0
Mesophilic aerobic bacteria count	<10000Cfu/g
Coli groups	<10Cfu/g
Escherichia Coli	negative / g
Yeasts and moulds	<100Cfu/g
Salmonella	negative / 25g
Staphylococcus aureus	negative /g
Identification	Infrared adsorption spectrum
Organic Volatile impurities	Meets the requirement
Chromatographic Purity	Meets the requirement

**Package:** 25kg/drum

**Shelf Life:** 2 Years

**Conclusion:** This product conforms to the requirement of USP32 standard.

**Storage:** Store in dry and cool place, and keep far away from sunlight.