GRHERB
Grherb Biotech Co.,Ltd

Certificate Of Analysis

Product Name:	Alpha Lipoic Acid	**Batch Quantity:**	500kg
Batch No:	GR-LA260323	**Manufacture Date:**	Mar.23,2026
Report Date:	Mar.25,2026	**Expiry Date:**	Mar.22,2028

Items		Standard	Results
Assay(Dried basis)		99.0% - 101%	99.1%
Appearance		Slightly yellow crystal powder	Conforms
Identification		IR-Spectroscopy	Conforms
		Liquid chromatography	Conforms
Melting Point		60.0 – 62.0℃	61.8℃
Specific rotation		-1.0° to +1.0°	0°
Loss on Drying		0.2% max	0.04%
Residue on Ignition		0.1% max	0.02%
Heavy Metals		10ppm max	Conforms
Lead		3ppm max	＜3ppm
Arsenic(As)		1ppm max	＜1ppm
Cadmium		1ppm max	＜1ppm
Mercury(Hg)		0.1ppm max	＜0.1ppm
Chromatographic Purity	Individual Impurities	0.1% max	Conforms
	Total Impurities	2.0% max	Conforms
	Chromatographic Purity	Conforms	Conforms
Residual Solvents	Cyclohexane	3880ppm max	750ppm
	Ethyl Acetate	500ppm max	90ppm
	Toluene	20ppm max	10ppm
Total aerobes counts		1000 cfu/g max	＜10 cfu/g
Moulds and Yeasts		100 cfu/g max	＜10 cfu/g
E.coli		Absence/g	Not Detectable
Staphylococcus aureus		Absence/g	Not Detectable
Salmonella		Absence/g	Not Detectable
Particle Size		100% through 40 mesh	Not Detectable
Loose Bulk Density			0.57g/ml
Conclusion		Conformed USP2021	

GRHERB BIOTECH CO.,LTD 西安绿禾源生物科技有限公司 质检专用章

Analysts: 李晓军 **Checker:** 朱红花 **Supervisor:** 王义军

Address: No.8, Keji Fifth Road, High-tech Zone,Xi'an,Shaanxi Province, China
Email: lisa@grherbs.com Tel: +86-15229262144