

### Specification Sheet

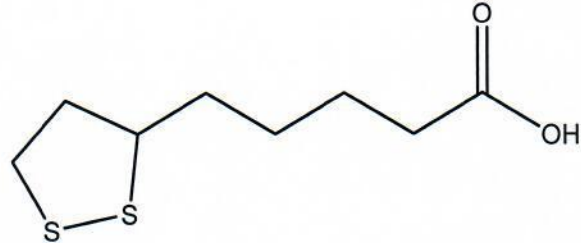
Product Name: Alpha Lipoic Acid solvent free

Molecular Formula: C<sub>8</sub>H<sub>14</sub>O<sub>2</sub>S<sub>2</sub>

Molecular Weight: 206.33

Structural Formula:

Shelf life: 2 years



Item	Specification	Test method
Appearance	Slightly yellow crystal powder	Organoleptic
Identification by HPLC	Meets the requirements	HPLC
Specific rotation	-1.0°~+1.0°	USP
Loss on Drying	≤ 0.5%	USP
Melting point	60.0°~62.0°	USP
Residue on ignition	≤ 0.1%	USP
Heavy metals	≤ 10ppm	USP
Lead	≤ 3ppm	USP
Cadmium	≤ 1ppm	USP
Mercury	≤ 0.1ppm	USP
Arsenic	≤ 1ppm	USP
Limit of polymer content	≤ 2.0%	TLC
Residual solvents	Ethyl acetate	≤ 0.1ppm GC
	Cyclohexane	≤ 0.1ppm GC



Item		Specification	Test method
	Toluene	≤ 0.1ppm	GC
Related substance	Individual impurities	≤ 0.1%	HPLC
	Total impurities	≤ 2.0%	HPLC
Particle Size		100% through 40 mesh	USP
Loose Bulk Density		Report Result	USP
Assay		98.5%~101.0% on the dried basis	HPLC
Total aerobic bacteria		≤1000cfu/g	USP
Mold & yeast		≤100cfu/g	USP
E.coli		Absence/g	USP
Staphylococcus aureus		Absence/g	USP
Salmonella		Absence/10g	USP
Storage:		Sealed storage at a temperature below 20°C in a dry and well-ventilated area, avoid exposure to heat and direct sunlight.	



Valid Date: 2023/01/17

Version: V 1.2