

Certificate of Analysis

<u>Item</u>	<u>Specification</u>	<u>Result</u>
Name:	Alpha-Lipoic Acid USP29	
Appearance:	Slightly yellow crystal powder almost odorless Conform	
Identification:	Lead Acetate test and UV method IR:Positive Conform	
Solubility(In NaOH):	Clear and pale yellow	Conform
Melting point:	60-62 D.C. D.C.	61-62
Specific rotation:	-1.0° Conform	~+1.0°
Heavy Metals:	10ppm Conform	Max.
Limit of polymer content:	2.0% 0.8%	Max.
Loss on drying:	0.2% 0.1%	Max.
Chloride:	0.07% 0.04%	Max.
Residue on ignition:	0.1% 0.03%	Max.
<u>Related Substances by HPLC</u>		
Purity:	99% 99.88%	~ 101%
6,8-Epitrithlooctanoic acid:	0.1% 0.08%	Max.
Single impurity:	0.1% 0.05%	Max.
Total impurities:	0.5% 0.35%	Max.
<u>Residual solvent by G.C.</u>		
Cyclohexane:	500ppm Conform	Max.