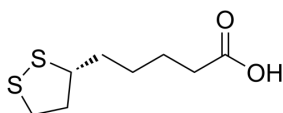


Certificate of Analysis

Product Name: Lipoic acid
Cat. No.: CS-5076
CAS No.: 1200-22-2
Batch No.: L742494
Chemical Name: 1,2-Dithiolane-3-pentanoic acid, (3R)-

PHYSICAL AND CHEMICAL PROPERTIES

Molecular Formula: C₈H₁₄O₂S₂
Molecular Weight: 206.33
Storage: 2-8°C, protect from light, stored under nitrogen
Chemical Structure:



ANALYTICAL DATA

Appearance: Light yellow to yellow (Solid)
¹H NMR Spectrum: Consistent with structure
Purity (NMR): ≥98.0%
Water(KF): 0.15%
Optical Rotation: 118.5°(C=0.01g/ml, ETOH, 20°C, 589nm)
Conclusion: The product has been tested and complies with the given specifications.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite F, Monmouth Junction, NJ 08852, USA