



上海诺创生物科技有限公司

Shanghai ZNC Biotechnology Co., Ltd.

Tel: 86-21-68453907

Fax: 86-21-58356660

Email: info@zncbio.com

Website: www.zncbio.com

## CERTIFICATE OF ANALYSIS

Product Name: Alpha Lipoic Acid

Batch Number: 20230817

Batch Quantity: 500KG

Manu Date: 2023-08-17

Expiry Date: 2025-08-16

| ITEMS              | SPECIFICATION  | RESULTS  |
|--------------------|--|----------|
| Appearance         | Yellow crystalline powder  | Conforms |
| Identification     | IR   | Conforms |
|                    | HPLC   | Conforms |
| Optical Rotation   | -1° to +1°   | 0        |
| Assay(Dry basis)   | 99.0% to 101.0%  | 99.05%   |
| Particle Size      | 90% Pass 80 Mesh   | Conforms |
| Loss on drying     | 0.2% Max   | 0.08%    |
| Ash                | 0.1% Max   | 0.01%    |
| Heavy metals       | 10 ppm Max   | Conforms |
| Related substances | Impurity A:0.2% Max  | 0.05%    |
|                    | Any other single impurity: 0.1% Max                              | 0.07%    |
|                    | Total impurities: 0.3% Max                                       | 0.19%    |
| Polymer            | Impurity B: 1.0% Max   | Conforms |
| Residual solvents  | Cyclohexane: 0.388% Max  | 0.21%    |
|                    | Ethyl Acetate: 0.5% Max  | N.D.     |
|                    | Toluene: 0.089% Max  | N.D.     |
| Total Plate Count  | 1000 cfu/g Max   | Conforms |
| Yeast & Mold       | 100 cfu/g Max  | Conforms |
| E-Coli             | Negative   | Negative |
| Salmonella         | Negative   | Negative |
| <b>Conclusion</b>  | Comply with In house Standard.                                   |          |
| <b>Storage</b>     | Store in cool & dry place, keep away from strong light and heat. |          |

Shawn  
Analyst

Rick  
Approved

Whip  
Header of QC