



Certificate of Analysis

| Draduct Name | | Country of Origin | China | |
|--------------|-----------------------|-------------------|----------------|--|
| Product Name | DL Choline Bitartrate | Quantity | 2Kg | |
| Standard | In-house standard | Package | 25 kg/drum | |
| Batch No.: | CB20250117 | MFG: 2025.01.17 | EXP:2027.01.16 | |

| Item | Specification | Results |
|-----------------------|------------------------------|----------|
| Appearance | White Hygroscopic Crystal | Conform |
| * Identification A& B | Passes USP Test | Conform |
| Assay | 99-100.5% | 99.59% |
| Choline | 40.7-41.3% | 40.97% |
| Moisture | NMT 0.5 % | 0.13% |
| PH(1 in 10) | 3.0-4.0 | 3.48 |
| Residue on Ignition | NMT 0.1% | 0.02% |
| Heavy Metals | NMT 10 ppm | Conform |
| Lead | NMT 2ppm | Conform |
| Arsenic | NMT 1 ppm | Conform |
| Cadmium | NMT0 .2 ppm | Conform |
| Mercury | NMT 0.1ppm | Conform |
| 1,4-Dioxane | NMT 10 ppm | Conform |
| Total Plate Count | NMT 1000 cfu/g | Conform |
| Yeast and Mold | NMT 100 cfu/g | Conform |
| E.coli | Negative/ 10g | Conform |
| * Salmonella | Negative/25 g | Conform |
| * Staphylococcus | Negative/ 10g | Conform |
| Bulk Density | 0.40-0.60g/ml | 0.56g/ml |
| Tapped Density | | 0.66g/ml |
| Particle Size | Through2 0 mesh | 100% |
| | Through40 mesh | 59.15% |
| | Through60 mesh | 24.53% |
| | Through80 mesh | 5.77% |
| | Through 100 mesh | 2.24% |

Packing:2 5kg/drum with two PE liners inside.

Storage: Preserve in well-closed containers in a cool, dry and well ventilated area.

Tested by: Liu Jun Hong Checked by: Xuguihuan Approved by: