



## Report of Analysis

|                           |              |                          |              |
|---------------------------|--------------|--------------------------|--------------|
| <b>Product name :</b>     | RU58841      | <b>CAS registry No :</b> | 154992-24-2  |
| <b>Batch No. :</b>        | 20190108     | <b>Quantity :</b>        | 1KG          |
| <b>Manufacture date :</b> | 08 Jan. 2019 | <b>Retest date :</b>     | 07 Jan. 2020 |

Shelf life :2 years when properly stored.

Storage: store in a cool dry place in well closed/sealed containers. Protect from light.

| Item                             | Specification                      | Result   |
|----------------------------------|------------------------------------|----------|
| Specific rotation                | +39.5 to +41.5°                    | Complies |
| State of solution(transmittance) | Clear 98.0% min.                   | Complies |
| Chloride[cl]                     | 0.020% max.                        | Complies |
| Ammonium [NH4]                   | 0.02% max.                         | Complies |
| Sulfate[SO4]                     | 0.020% max                         | Complies |
| Iron[Fe]                         | 10ppm max.                         | 0.1ppm   |
| Heavy metals [Pb]                | 10ppm max                          | 0.02ppm  |
| Arsenic[As2O3]                   | 1ppm max                           | 0.03ppm  |
| Other amino acids                | Chromatographically not detectable | Complies |
| Residue on ignition[sulfated]    | 0.10% max.                         | 0.002%   |
| Assay                            | 99.0% min                          | 99.5     |

**This Product meets current European Pharmacopeia Requirements.**

**Additional Tests carried out in Addition to European Pharmacopeia requirements**

| Test                                      | Specification | Results  |
|---|---------------|----------|
| Heavy metals –by atomic absorption        |               |          |
| 1)Total heavy metals                      | ≤10ppm        | 0.12ppm  |
| 2) Arsenic (As)                           | ≤0.5ppm       | 0.01ppm  |
| 3) Cadmium (Cd)                           | ≤1ppm         | 0.03ppm  |
| 4) Lead (Pb)                              | ≤2ppm         | 0.05ppm  |
| 5) Mercury (hg)                           | ≤0.5ppm       | 0.03ppm  |
| Microbiological Tests                     |               |          |
| 1)Total Plate count                       | ≤100cfu/g     | 0.1cfu/g |
| 2) Total Yeast and Mould                  | ≤10cfu/g      | 0.1cfu/g |
| 3) E. Coli in 10g                         | Absent        | Complies |
| 4) Salmonella in 10g                      | Absent        | Complies |
| 5) Staphylococcus in 10g                  | Absent        | Complies |
| Other Impurities-using Gas Chromatography |               |          |
| 1)Sulphates                               | ≤0.05ppm      | 0.001ppm |
| 2) Organic Phosphates                     | ≤0.05ppm      | 0.001ppm |
| 3) Organic residues                       | ≤0.05ppm      | 0.001ppm |
| 4) DDT Pesticide residue-by GC            | ≤0.05ppm      | 0.001ppm |
| 5) BHC Pesticide Residue-by GC            | ≤0.05ppm      | 0.001ppm |

**Conclusion:**This product conforms to the enterprise standard .