

## Certificate of Analysis

|                     |                            |                  |             |
|---------------------|----------------------------|------------------|-------------|
| <b>Product Name</b> | Undecylenoyl phenylalanine | <b>CAS No.</b>   | 175357-18-3 |
| <b>Batch No.</b>    | KN0520110502               | <b>Mfg. Date</b> | 2020.11.05  |
| <b>Batch Qty.</b>   | 100kg                      | <b>Exp. Date</b> | 2022.11.04  |

| Items                          | Specifications                            | Results      |
|--------------------------------|-------------------------------------------|--------------|
| Assay                          | ≥99.0%                                    | 99.2%        |
| Appearance                     | White powder                              | White powder |
| Color                          | ≤250                                      | Complies     |
| Loss on drying                 | ≤1.0%                                     | 0.053%       |
| Total Nitrogen                 | 3.5-4.5%                                  | 4.3%         |
| Free undecylenic acid          | ≤2.0%                                     | 0.13%        |
| Mineral acid (HCl)             | ≤0.5%                                     | 0.05%        |
| Sulphate ashes                 | ≤1.0%                                     | 0.35%        |
| <b>Heavy Metals</b>            | ≤10ppm                                    | <10ppm       |
| As                             | ≤2ppm                                     | <2ppm        |
| Pb                             | ≤2ppm                                     | <2ppm        |
| Cd                             | ≤1ppm                                     | <1ppm        |
| Hg                             | ≤0.1ppm                                   | <0.1ppm      |
| <b>Microbiological Content</b> |                                           |              |
| Total Plate Count              |                                           | <1000cfu/g   |
| Yeast & Mold                   | ≤1000cfu/g                                | <100cfu/g    |
| E.Coil                         | ≤100cfu/g                                 | Negative     |
| Salmonella                     | Negative                                  | Negative     |
| Staphylococcus                 | Negative                                  | Negative     |
| Conclusion:                    | The product complies with specifications. |              |

