

## SPECIFICATION

|                                                      |
|------------------------------------------------------|
| <b>Product Name:</b> L- lysine HCL Powder Feed Grade |
| <b>Chemical Formula:</b> $C_6H_{14}N_2O_2 \cdot HCl$ |
| <b>CAS Number:</b> 657-27-2                          |
| <b>Molecular Weight:</b> 182.65 g/mol                |
| <b>Appearance:</b> Light yellow Powder               |
| <b>Odor:</b> Odorless                                |

### Chemical Composition

| Parameter           | Unit | Typical Value | Specification                                                              |
|---------------------|------|---------------|----------------------------------------------------------------------------|
| Assay               | %    | 98.7          | 98.5 – 101.5                                                               |
| Loss on Drying      | %    | 0.36          | Not more than 0.40                                                         |
| Solubility          |      | conform       | Soluble in water, some haziness in solution may occur due to encapsulation |
| <b>Heavy Metals</b> |      |               |                                                                            |
| Lead                | PPM  | Not Detected  | Max. 5.0                                                                   |
| Cadmium             | PPM  | Not Detected  | Max 1.0                                                                    |
| Arsenic             | PPM  | Not Detected  | Max 1.0                                                                    |
| Mercury             | PPM  | Not Detected  | Max 1.0                                                                    |
| <b>Microbiology</b> |      |               |                                                                            |

|                    |          |        |          |
|--------------------|----------|--------|----------|
| Total Plate Counts | cfu/gm   | 120    | Max 1000 |
| Yeast & Mould      | cfu/gm   | 45     | Max 100  |
| E. Coli            | cfu/10gm | Absent | Negative |
| Salmonella         | cfu/10gm | Absent | Negative |
| S. Aureus          | cfu/10gm | Absent | Negative |

### **Physical Properties**

- Solubility: Freely soluble in water; practically insoluble in alcohol.

### **Shelf Life & Storage**

- Shelf Life: 2 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry, and well-ventilated area. Keep tightly closed in original packaging. Protect from moisture and humidity (product is hygroscopic). Keep away from direct sunlight and heat sources.

### **Applications**

- Use: Essential amino acid supplement in compound feed.
- Dosage: Varies by species, age, diet composition, and target lysine level in the final feed.

### **Packaging**

- Standard Packing: 25 kg woven PP bags with inner liner, 1Kgs and 100grams, or as per customer requirement.
- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

\* Specifications are based on the manufacturer's provided specifications.