

## **CERTIFICATE OF ANALYSIS**

## L-PHENYLALANINE

| ITEM                             | SPECIFICATION         | RESULT            |
|----------------------------------|-----------------------|-------------------|
| 1. Identification:               | Meet the requirements | Conforms          |
| 2. PH:                           | 5.4 to 6.0            | 5.85              |
| 3. Chloride:                     | Not more than 0.05%   | Less than 0.02%   |
| 4. Sulfate:                      | Not more than 0.03%   | Less than 0.02%   |
| 5. Iron:                         | Not more than 0.003%  | Less than 0.003%  |
| 6. Specific rotation:            | -32.7 to -34.7        | -34               |
| 7. Loss on drying:               | Not more than 0.03%   | Less than 0.02%   |
| 8. Residue on ignition:          | Not more than 0.4%    | Less than 0.01%   |
| 9. Heavy metals                  | Not more than 0.0015% | Less than 0.0015% |
| 10. Chromatographic purity:      | Meet the requirements | Conforms          |
| 11. Organic volatile impurities: | Meet the requirements | Conforms          |
| 12. Assay:                       | 98.5% to 101.5%       | 99.1%             |