

# PRODUCT DATA

## L-Lactic Acid (90%) (CRG)

### Description

L-Lactic acid 90% (CRG) is the natural L (+) lactic acid, which is produced by bio-fermentation from grain starch. It's colorless or yellowish, nearly odorless, syrupy liquid having a slight acid taste. It is hygroscopic, and all soluble in water, ethanol or ether, but insoluble in chloroform.

### Information

|                   |                                               |
|-------------------|-----------------------------------------------|
| Chemical name     | L (S)-2-hydroxypropionic acid                 |
| Molecular formula | CH <sub>3</sub> CH(OH)COOH                    |
| Molecular weight  | 90.08                                         |
| CAS               | 79-33-4                                       |
| Packing           | Polyethylene drum, Net 250kg or 25kg per drum |

### Specification (Complies with: USP, JP, CP, FCC)

|                                              |                                                                                         |
|----------------------------------------------|-----------------------------------------------------------------------------------------|
| Identification                               | Lactic acid solution (1+10) is acidic.<br>Lactic acid responds to the test for Lactate. |
| Assay, w/%                                   | Not less than 95.0 and not more than 105.0 of the labeled concentration                 |
| Stereochemical purity, %<br>L/(L+D)×100      | ≥99.5                                                                                   |
| Sulphated ash, w/%                           | ≤0.05                                                                                   |
| Chloride (as Cl), w/%                        | ≤0.001                                                                                  |
| Sulphates (as SO <sub>4</sub> ), w/%         | ≤0.001                                                                                  |
| Iron (Fe), w/%                               | ≤0.0005                                                                                 |
| Cyanide, mg/kg                               | ≤1.0                                                                                    |
| Citric, oxalic, tartaric and phosphoric acid | Passes test                                                                             |
| Sugars                                       | Passes test                                                                             |
| Readily carbonizable substances              | Passes test                                                                             |
| Lead (Pb), mg/kg                             | ≤2.0                                                                                    |
| Arsenic (As), mg/kg                          | ≤1.0                                                                                    |
| Color, APHA                                  | ≤15                                                                                     |
| Color (180°C, 2hs), APHA                     | ≤15                                                                                     |
| Volatile fatty acid                          | Passes test                                                                             |
| Methanol, w/%                                | ≤0.20                                                                                   |
| Heavy metals (as Pb), mg/kg                  | ≤5                                                                                      |
| Ether insoluble substances                   | Passes test                                                                             |
| Calcium                                      | Passes test                                                                             |
| Density (20°C), g/ml                         | 1.200~1.220                                                                             |