



## Certificate of Analysis

|                  |                   |
|------------------|-------------------|
| Creation date    | 30.07.2021        |
| Your order no.   | 4500526117        |
| Date             | 26.05.2021        |
| Delivery note    | 80896859   000030 |
| Date of dispatch | 30.07.2021        |
| Our reference    | 831995   000030   |
| Date             | 26.05.2021        |
| Client number    | 222941            |
| Date of arrival  | 03.08.2021        |

### Material / Product / Description

137234 / / Sodium-L(+)-lactate 60% food grade in 25 kg drums

### Shipping point

Jungbunzlauer S.A., Z.I. Et Portuaire - B.P. 32, 67390 Marckolsheim

| Batch   | Quantity | Date of production | Date of expiry | Production plant, country | Country of Origin |
|---------|----------|--------------------|----------------|---------------------------|-------------------|
| 5134956 | 800 KG   | 14.07.2021         | 07.2024        | Marckolsheim, FR          | FR                |

We herewith confirm that this product is specified to meet the requirements of the latest edition of the Food Chemicals Codex (FCC) and of Commission Regulation (EU) No 231/2012. All analytical methods are in accordance with the latest requirements of the FCC or are equivalent. Test methods are available on request.

| Parameter                             | Unit  | Specification | Value     |
|---------------------------------------|-------|---------------|-----------|
| Assay                                 | %     | 59.0 - 61.0   | 60.3      |
| Stereochemical purity (L-isomer)      | %     | >= 97         | conforms* |
| Sodium content                        | %     | 12.1 - 12.6   | conforms* |
| Colour (fresh)                        | APHA  | <= 50         | 22        |
| Identification                        |       |               | conforms  |
| Density (20°C)                        | g/cm3 | 1.32 - 1.34   | 1.32      |
| Acidity (as lactic acid)              | %     | <= 0.3        | conforms* |
| pH value (20% solution)               |       | 6.5 - 7.5     | 7.5       |
| pH (direct)                           |       | 6.5 - 8.5     | 8.3       |
| Sulphate                              | mg/kg | <= 20         | conforms* |
| Chloride                              | mg/kg | <= 50         | conforms* |
| Cyanide                               | mg/kg | <= 0.3        | conforms* |
| Iron                                  | mg/kg | <= 10         | conforms* |
| Arsenic                               | mg/kg | <= 1          | conforms* |
| Lead (Pb)                             | mg/kg | <= 2          | conforms* |
| Mercury                               | mg/kg | <= 1          | conforms* |
| Heavy Metals (as Pb)                  | mg/kg | <= 5          | conforms* |
| Methanol and methyl esters            | mg/kg | <= 50         | conforms* |
| Citrate, oxalate, phosphate, tartrate |       |               | conforms* |
| Reducing sugars                       |       |               | conforms* |

\*) Analysis is confirmed based on In-Process-Control or by random testing.

This computer generated certificate is valid without signature.

Quality Control Manager

Isabelle HABY

