

## CERTIFICATE OF ANALYSIS

Product : **MANNITOL (D-)**  
 Product number : M0803  
 Batch number : 012253  
 Date of production : xx-12-2015  
 Date of expiry : 31-12-2020

Packaging and storage : in a well-closed container, protected from light

|                        | SPECIFICATION                                    | RESULT   | UNITS | REMARKS                 |
|------------------------|--|----------|-------|-------------------------|
| Appearance             | white crystalline powder, odourless, sweet taste | complies |       |                         |
| Smeltpunt              | 165.0 – 170.0                                    | 167.2    | °C    |                         |
| Identification:        |  |          |       |                         |
| - C (IR-spectrum)      | conform  | complies |       |                         |
| Appearance of solution | clear and colourless                             | complies |       | 10% in H <sub>2</sub> O |
| Conductivity           | ≤ 20.0   | 5.0      | μS/cm | 20% in H <sub>2</sub> O |
| Reducing sugars        | ≤ 0.10   | < 0.10   | %     |                         |
| Related substances     | conform  | complies |       | HPLC                    |
| Nickel                 | ≤ 1.0  | complies | ppm   |                         |
| Heavy metals           | ≤ 5.0  | complies | ppm   |                         |
| Loss on drying         | ≤ 0.50   | 0.06     | %     |                         |
| Assay                  | 98.0 – 102.0                                     | 99.1     | %     | HPLC                    |

This certificate of analysis is conform the results of the manufacturer.

Conclusion: approved  
 Released by:

drs. M. van Wissen, pharmacist  
 Department of Quality Control Duchefa B.V.

Date: 18-07-2016



The buyer is responsible to test each batch to ensure the product is suitable for their specific purpose.