

## CERTIFICATE OF ANALYSIS

Product : **MES**  
Product number : **M1503**  
Batch number : **011755**  
Date of analysis : **15-12-2015**  
Date of expiry : **31-12-2018**

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

|                     | SPECIFICATION       | RESULT   | UNITS | REMARKS                   |
|---------------------|---------------------|----------|-------|---------------------------|
| Appearance          | white coarse powder | complies |       |                           |
| Solubility          | clear and complete  | complies |       |                           |
| Identity            | conform             | complies |       | IR-spectrum               |
| Moisture            | 8.0 – 9.0           | 8.4      | %     | 120 °C                    |
| pH                  | 2.5 – 4.0           | 3.2      |       | 0.5 M in H <sub>2</sub> O |
| pKa                 | 6.15                | 6.2      |       | 20 °C                     |
| Chloride            | ≤ 50                | 13       | ppm   |                           |
| Sulphate            | ≤ 50                | 6        | ppm   |                           |
| Heavy metals        | conform             | complies | %     | as Pb                     |
| Residue on ignition | ≤ 0.01              | < 0.001  | %     |                           |
| UV-absorbance:      |                     |          |       | 5% in H <sub>2</sub> O    |
| - A250nm            | ≤ 0.05              | 0.002    |       |                           |
| Assay               | ≥ 99.0              | 99.9     | %     | dried substance           |

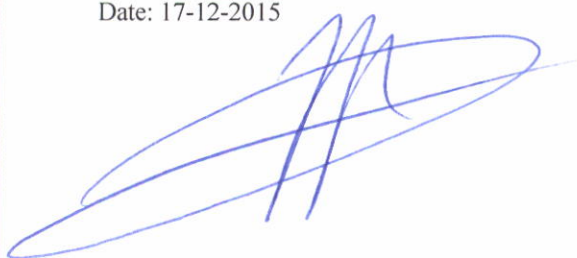
This certificate of analysis is conform the results of the manufacturer.

Conclusion: approved

Released by:

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

Date: 17-12-2015



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