

## CERTIFICATE OF ANALYSIS

Product : **GLUTATHIONE REDUCED**  
 Product number : G1346  
 Batch number : 016364  
 Date of production : xx-05-2021  
 Date of expiry : 31-05-2024

Packaging and storage : store in a well-closed container, store at room temperature

|                           | SPECIFICATION            | RESULT   | UNITS | REMARKS         |
|---------------------------|--------------------------|----------|-------|-----------------|
| Appearance                | white crystalline powder | complies |       |                 |
| Identification            | conform                  | complies |       | HPLC            |
| Transmittance             | ≥ 98                     | complies | %     | 5% solution     |
| Specific optical rotation | -17.5 -- -15.5           | -16.4    | °     | dried substance |
| pH                        | 2.5 – 3.5                | complies |       | 5% water        |
| Enzymatic activity        | ≥ 98.0                   | complies | %     |                 |
| Heavy metals              | ≤ 10                     | complies | ppm   | Pb              |
| Iron                      | ≤ 1                      | complies | ppm   |                 |
| Arsenic                   | ≤ 1                      | complies | ppm   |                 |
| Ammonium                  | ≤ 200                    | complies | ppm   |                 |
| Sulfate                   | ≤ 300                    | complies | ppm   |                 |
| Total impurities          | ≤ 2.0                    | 1.0      | %     | HPLC            |
| Residue on ignition       | ≤ 0.10                   | 0.02     | %     |                 |
| Loss on drying            | ≤ 0.50                   | 0.30     | %     |                 |
| Assay                     | ≥ 98.0-101.0             | 99.0     | %     | 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: 23-07-2021



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

Duchefa Biochemie B.V.

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