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Cod. Oqema: 071410  
Lotto Oqema: 2024004353

Certificate of Analysis

Date of Print: 2024-06-28

|                                              |                                                                               |                                             |
|----------------------------------------------|-------------------------------------------------------------------------------|---------------------------------------------|
| 302076                                       | Magnesium Chloride-6-hydrate chem. pure, cryst.,<br>Ph. Eur., USP, FCC, E 511 |                                             |
| Batch                                        | 0000001598                                                                    |                                             |
| Date of Examination (yyyy-mm-dd): 2024-06-20 |                                                                               | Minimum Shelf Life (yyyy-mm-dd): 2027-05-31 |
|                                              | Specification                                                                 | Batch Values                                |
| Appearance                                   | white crystals                                                                | white crystals                              |
| Identity                                     | passes test                                                                   | passes test                                 |
| Appearance of solution (10%; water)          | clear and colourless                                                          | clear and colourless                        |
| Assay (MgCl <sub>2</sub> ·6H <sub>2</sub> O) | 99,0 - 101,0 %                                                                | 100,6 %                                     |
| Water (according to Karl Fischer)            | 51,0 - 55,0 %                                                                 | 53,2 %                                      |
| pH value (5%)                                | 4,5 - 7,0                                                                     | 5,6                                         |
| Acidity (0,01 M NaOH/0,5g)                   | ≤ 0,30 ml                                                                     | 0,05 ml                                     |
| Alkalinity (0,01 M HCl/0,5g)                 | ≤ 0,30 ml                                                                     | 0,00 ml                                     |
| Insoluble matter (water)                     | ≤ 0,005 %                                                                     | < 0,005 %                                   |
| Barium                                       | passes test                                                                   | passes test                                 |
| Ammonium (NH <sub>4</sub> )                  | ≤ 50,0 mg/kg                                                                  | < 20,0 mg/kg                                |
| Calcium (Ca)                                 | ≤ 100,0 mg/kg                                                                 | < 10,0 mg/kg                                |
| Bromide (Br)                                 | ≤ 500,0 mg/kg                                                                 | < 20,0 mg/kg                                |
| Potassium (K)                                | ≤ 500,0 mg/kg                                                                 | < 1,0 mg/kg                                 |
| Sulphate (SO <sub>4</sub> )                  | ≤ 50,0 mg/kg                                                                  | < 5,0 mg/kg                                 |
| Aluminium (Al)                               | ≤ 1,0 mg/kg                                                                   | < 0,5 mg/kg                                 |
| Iron (Fe)                                    | ≤ 10,0 mg/kg                                                                  | < 0,5 mg/kg                                 |
| Heavy metals (as Pb)                         | ≤ 10,0 mg/kg                                                                  | < 2,0 mg/kg                                 |
| Arsenic (As)                                 | ≤ 2,0 mg/kg                                                                   | < 0,5 mg/kg                                 |
| Lead (Pb)                                    | ≤ 2,0 mg/kg                                                                   | < 0,5 mg/kg                                 |

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Amtsgericht Hildesheim HRA 201452  
Ust.-Id.-Nr.: DE 295 109 928  
Geschäftsführer: Sebastian Reichenbach,  
Daniel F. Schüssler, Dr. Ralf Tiedemann  
  
Oberbank  
IBAN: DE59 7012 0700 1901 1001 70  
BIC: OBKLD333

HypoVereinsbank  
IBAN: DE70 8002 0086 0022 0484 90  
BIC: HYVEDE33  
  
Commerzbank AG  
IBAN: DE73 8004 0000 0112 0732 00  
BIC: COBADE33

Postbank  
IBAN: DE84 1001 0010 0926 4181 04  
BIC: PBNKDE33  
  
Deutsche Bank  
IBAN: DE29 8607 0000 0549 0669 00  
BIC: DEUTDE33



SINCE 1888

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| Batch                                        | 0000001598                                                                    |                                  |            |
| Date of Examination (yyyy-mm-dd): 2024-06-20 |                                                                               | Minimum Shelf Life (yyyy-mm-dd): | 2027-05-31 |
| Mercury (Hg)                                 | ≤ 1,0 mg/kg                                                                   | < 0,5 mg/kg                      |            |
| Cadmium (Cd)                                 | ≤ 1,0 mg/kg                                                                   | < 0,5 mg/kg                      |            |

This product complies to the requirements according to ICH Guideline Impurities: "Residual solvents" (CPMP/ICH/283/95) – Ph. Eur. and/or USP.

**Viola Falke**

responsible laboratory manager quality control

*This document has been produced electronically and is valid without a signature.*

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