

Certificate of Analysis

Product Name: MAGNESIUM OXIDE
puriss., meets analytical specification of Ph. Eur., BP, USP,
FCC, E 530, light, 98.0-100.5 % calc. for dried substance

Product Number: 13138

Batch Number: BCBW0010

Brand: Sigma-Aldrich

CAS Number: 1309-48-4

Formula: MgO

Formula Weight: 40.30

Quality Release Date: 08 DEC 2017

Recommended Retest Date: SEP 2022

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	WHITE	WHITE
APPEARANCE (FORM)	POWDER	POWDER
TITRATION (KT) EDTA 0.1M	98.0 - 100.5 % (CALC. TO IGNITED SUBSTANCE)	98.5 %
SOLUBILITY (COLOR)	COMPLYING	COMPLYING
SOLUBILITY (TURBIDITY)	COMPLYING	COMPLYING
SOLUBILITY (METHOD)	ACC. TO PH.EUR.	ACC. TO PH.EUR.
LOSS ON IGNITION	≤ 5.0 %	2.5 %
PHARMAKOPOEA TESTS	CORRESPONDS TO REQUIREMENTS	CORRESPONDS TO PH.EUR.
Remarks on Pharmacopoea Test	IN WATER SOLUBLE MATTER ≤ 1.0 % INSOLUBLE IN ACETIC ACID ≤ 0.1 % HEAVY METALS (IN PB) ≤ 20MG/KG	IN WATER SOLUBLE MATTER < 1.0 % INSOLUBLE IN ACETIC ACID < 0.1 % HEAVY METALS (IN PB) < 20MG/KG
PROOF OF IDENTITY	BULK DENSITY ≤ 0.15 G/ML	BULK DENSITY 0.15 G/ML
MISCELLANEOUS TESTS	INSOLUBLE IN HCL ≤ 0.1 % FREE ALKALI + SOLUBLE SALTS COMPLYING	INSOLUBLE IN HCL < 0.1 % FREE ALKALI + SOLUBLE SALTS COMPLYING
CALCIUM (ICP)	≤ 10000 MG/KG	< 10000 MG/KG
COPPER (ICP)	≤ 10 MG/KG	< 10 MG/KG
IRON (ICP)	≤ 200 MG/KG	< 200 MG/KG
LEAD (ICP)	≤ 2 MG/KG	< 2 MG/KG
ZINC (ICP)	≤ 10 MG/KG	< 10 MG/KG
ARSENIC TRACES (MHS-AAS)	≤ 2 MG/KG	< 2 MG/KG

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TOTAL SULFUR AS SO₄ (ICP)	≤ 5000 MG/KG	< 5000 MG/KG
CHLORIDE (CL)	≤ 500 MG/KG	< 500 MG/KG
RESIDUAL SOLVENTS (GLC-HS)	COMPLYING	COMPLYING



Dr. Claudia Geitner
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Buchs, Switzerland

Sigma-Aldrich warrants that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.