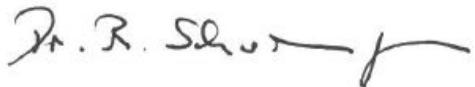# Certificate of Analysis

Product Name:	MAGNESIUM SULFATE HEPTAHYDRATE 99.5-100.5 % calc. to the dried substance, meets analytical specification of Ph. Eur., BP,USP, FCC
Product Number:	13142
Batch Number:	BCCB0747
Brand:	Sigma-Aldrich
CAS Number:	10034-99-8
Formula:	$MgSO_4 * 7H_2O$
Formula Weight:	246.47
Quality Release Date:	26 FEB 2019
Recommended Retest Date:	JUL 2022

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	WHITE TO OFF WHITE	OFF WHITE
APPEARANCE (FORM)	POWDER OR CRYSTALS	CRYSTALS
TITRATION (KT) EDTA 0.1M	99.5 - 100.5 % (CALCULATED TO THE DRIED SUBSTANCE)	99.9 %
SOLUBILITY (COLOR)	COMPLYING	COMPLYING
SOLUBILITY (TURBIDITY)	COMPLYING	COMPLYING
SOLUBILITY (METHOD)	ACC. TO PH.EUR.	ACC. TO PH.EUR.
PH-TEST	5.0 - 9.2	6.5
PH (METHOD)	5% IN WATER, 25C	5% IN WATER, 25C
LOSS ON DRYING	48.0 - 52.0 % (450C)	51.3 %
PHARMACOPOEA TESTS	CORRESPONDS TO REQUIREMENTS	CORRESPONDS TO PH.EUR.
Remarks on Pharmakopoea	IDENTITY COMPLYING	IDENTITY COMPLYING
Test	FREE ACID (AS H2SO4) $\leq$ 0.01% FREE ALKALI (AS MGO) $\leq$ 0.004% ACIDITY OR ALKALINITY COMPLYING HEAVY METALS (AS PB) $\leq$ 10MG/KG	FREE ACID (AS H2SO4) $\leq$ 0.01% FREE ALKALI (AS MGO) $\leq$ 0.004% ACIDITY OR ALKALINITY COMPLYING HEAVY METALS (AS PB) $\leq$ 10MG/KG
IRON (ICP)	$\leq$ 20 MG/KG	< 20 MG/KG
LEAD (ICP)	$\leq$ 4 MG/KG	< 4 MG/KG
ARSENIC TRACES (MHS-AAS)	$\leq$ 2 MG/KG	$\leq$ 2 MG/KG

Certificate of Analysis

SELENIUM TRACES (MHS-AAS)	≤ 30 MG/KG	< 30 MG/KG
CHLORIDE (CL)	≤ 100 MG/KG	100 MG/KG
RESIDUAL SOLVENTS (GLC-HS)	COMPLYING	COMPLIES

Dr. Reinhold Schwenninger
Quality Assurance
Buchs, Switzerland