

## CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by Intertek Global Certificate Number. CERT-0120633

Catalogue Number	M35
Lot Number	252281
Description	MAGNESIUM CHLORIDE HEXAHYDRATE USP/FCC
CAS Number	7791-18-6
Quality Test/Release Date	31/Jul/2025
Suggested retest date	12/May/2030
Country of Origin	Germany
Declaration of Origin	Inorganic-non animal
BSE/TSE	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Colorless crystals, very hygroscopic.
FCC Grade - AMMONIUM	%	<= 0.005	<0.005
FCC Grade - ASSAY	%	Inclusive Between 99.0 - 105.0	99.9
FCC Grade - IDENTIFICATION (ALL LISTED)	PASS/FAIL	= PASS TEST	PASS TEST
FCC Grade - LEAD (Pb)	MG/KG	<= 4	<1
FCC Grade - SULFATE	%	<= 0.03	<0.005
N/A - LIMIT OF CALCIUM	%	<= 0.01	<0.01
USP Grade - ASSAY	%	Inclusive Between 98.0 - 101.0	99.9
USP Grade - BARIUM	PASS/FAIL	= PASS TEST	PASS TEST
USP Grade - ENDOTOXINS	EU/Mg	= REPORT	<2.5
USP Grade - IDENTIFICATION (ALL LISTED)	PASS/FAIL	= PASS TEST	PASS TEST
USP Grade - INSOLUBLE SUBSTANCES	%	<= 0.005	<0.005
USP Grade - POTASSIUM	PASS/FAIL	= PASS TEST	PASS TEST
USP Grade - RESIDUAL SOLVENTS	PASS/FAIL	= PASS TEST	PASS TEST
USP Grade - SULFATE (SO4)	%	<= 0.005	<0.005
USP Grade - pH OF A 5% SOLUTION		Inclusive Between 4.5 - 7.0	5.5

Harout Sahagian  
QC Manager

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research use or further manufacturing. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of the catalogue number listed above.