



**ChemPure* Brand
Chemicals**

April 7, 2016

Certificate of Analysis

...Pure Quality

Product Name: **MAGNESIUM CHLORIDE HEXAHYDRATE, ACS/USP/IP/BP/EP**

Product Number: CP-A1638D, M1638D, X1638D Formula: MgCl₂ - 6H₂O
 CAS Number: 7791-18-6 Formula Weight: 203.30 G/MOL
 Lot Number: BF15107 MDL NO: MFCD00149781
 Manufactured Date: June 6, 2015 Retest: June 30, 2020

ANALYTICAL RESULTS

TEST	SPECIFICATIONS	RESULTS
Description	Colorless Crystals	Colorless Crystals
Identification (USP)	To Pass Test	To Pass Test
Assay (%) (ACS, USP)	99.0 – 102.0%	100.40%
pH of (1 in 20ml solution)@25C (USP)	4.5-7.0	5.92
Insoluble matter (ACS, USP)	≤0.005%	0.0016%
Acid or alkalinity	To Pass Test	To Pass Test
Aluminum(Al)	≤1 ppm	<1 ppm
Ammonium (NH ₄) (ACS)	≤0.002%	<0.002%
Arsenic (As) (USP)	≤2ppm	<2ppm
Barium (Ba) (ACS)	≤0.005%	<0.005%
Barium (Ba) (USP)	To Pass Test	To Pass Test
Bromide(Br) (ACS)	≤0.05%	<0.05%
Nitrate (NO ₃) (ACS, USP)	≤0.001%	<0.001%
Phosphate (PO ₄) (ACS)	≤5 ppm	<5 ppm
Sulfate (SO ₄) (ACS, USP)	≤0.002%	<0.002%
Heavy metals (Pb) (ACS)	≤5 ppm	<5 ppm
Iron (Fe) (ACS)	≤5 ppm	<5 ppm
Calcium (Ca) (ACS, USP)	≤0.01%	<0.01%
Potassium (K) (ACS)	≤0.005%	<0.005%
Potassium (K) (USP)	To Pass Test	To Pass Test
Manganese (Mn) (ACS)	≤5 ppm	<5 ppm
Sodium (Na) (ACS)	≤0.005%	<0.005%
Strontium (Sr) (ACS)	≤0.005%	<0.005%
Water(Internal)	51.0%-55%	53.20%
Organic Volatile Impurities	To Pass Test	To Pass Test
Appearance in 10% Solution	Clear & Colorless	Clear & Colorless
Lead(Pb) (USP)	≤ 4 mg/ka	3 mg/kg
Bacterial Endotoxin	Report	< 3.9 EU/mEq

Residual Solvents: (USP) Solvents (other than water was not used during production or purification of this product.

Disclaimer: To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. However, nothing herein shall constitute any express or implied warranty of merchantability or fitness for a particular purpose. It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose.

It is certified that the above copy is a true copy of the actual lot analysis from the manufacturer. Vyto Mekesa, QC Manager Gulab Menghrajani, Technical Analyst