

Certificate of Analysis

HR2-559

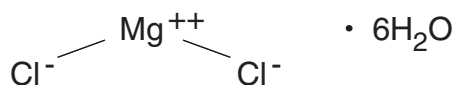
Optimize™ reagents are preformulated macromolecular crystallization grade solutions designed specifically for the crystallization of proteins, peptides, and nucleic acids. Each Optimize solution is formulated using high purity salts, polymers, and buffers. Sterile filtered Optimize reagents are formulated at convenient ready to use concentrations. Optimize reagents remove the guesswork and make the process of reproducing preliminary screening conditions and general optimization faster, easier, and more convenient. When using Optimize reagents the user moves directly from the screen to the optimization with no time wasted searching for and formulating salts, buffers, and viscous polymers. This Certificate of Analysis indicates the quality and performance of the reagent.

Technical Support

Inquiries regarding Optimize reagent formulation, interpretation of screen results, optimization strategies and general inquiries regarding crystallization are welcome. Please e-mail, fax, or telephone your request to Hampton Research. Fax and e-mail Technical Support are available 24 hours a day. Telephone technical support is available 8:00 a.m. to 5:00 p.m. USA Pacific Standard Time.

Danielle Taylor
Quality Control

<u>Property Test</u>	<u>Lot (Sample) Results</u>
Product Name	2.0 M Magnesium chloride hexahydrate
Synonym	None
Product Number	HR2-559
Formula	MgCl ₂ · 6H ₂ O
Formula Weight	203.30
CAS Number	[7791-18-6]
EC Number	2320946
RTECS	OM2975000
Purity	≥ 99.0 %
Appearance (Starting Material)	White, Fine Crystals with Lumps
Appearance (Solution)	Clear, Colorless
Titration (KT) Range EDTA 0.1M	99.0 - 99.9 %
Water	52.9 %
Metal Trace Analysis (ICP)	Passed
Arsenic Traces (MHS-AAS)	≤ 0.05 mg/kg



<u>Property Test</u>	<u>Lot (Sample) Results</u>
Residue (Filter Test)	No Residue
Absorbance (λ)	1.0 M in H ₂ O
UV Absorption	λ: 260 nm A max: 0.030 λ: 280 nm A max: 0.025
Refractive Index Range	1.37544 - 1.37657 at 20 °C
pH Range	4.8 - 6.0 at 25 °C
Conductivity Range	136.2 - 160.2 mS at 25 °C
Total Impurities	insoluble matter, passes filter test
Al	≤ 0.0005%
As	≤ 0.00001%
Ba	≤ 0.0005%
Bi	≤ 0.0005%
Ca	≤ 0.005%
Cd	≤ 0.0005%
Co	≤ 0.0005%
Cr	≤ 0.0005%
Cu	≤ 0.0005%
Fe	≤ 0.0005%
K	≤ 0.2%
Li	≤ 0.0005%
Mn	≤ 0.0005%
Mo	≤ 0.0005%
N	≤ 0.0002%
Na	≤ 0.3%
Ni	≤ 0.0005%
PO ₄	≤ 0.0005%
Pb	≤ 0.0005%
SO ₄	≤ 0.005%
Sr	≤ 0.0005%
Zn	≤ 0.0005%

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