

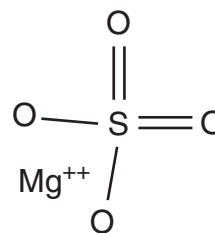
Certificate of Analysis**HR2-633**

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

**Property Test**

Ca
Cd
Cl
Co
Cu
Fe
K
Na
Ni
Pb
Zn

Lot (Sample) Results

≤ 0.02%
≤ 0.005%
≤ 0.02%
≤ 0.005%
≤ 0.005%
≤ 0.005%
≤ 0.05%
≤ 0.01%
≤ 0.005%
≤ 0.005%
≤ 0.005%

Property Test	Lot (Sample) Results
Product Name	2.5 M Magnesium sulfate hydrate
Synonym	Magnesium sulphate hydrate
Product Number	HR2-633
Formula	MgSO ₄ · aq
Formula Weight	120.37 + aq
CAS Number	[22189-08-8]
EC Number	231-298-2
Purity	≥ 99.0%
Titration (KT) EDTA 0.1 M	99.3%
Appearance (Starting Material)	White, Powder
Solubility (Color)	Clear, Colorless
Loss on Ignition	≤ 36%, 500 °C
Refractive Index Range	1.36802 - 1.36836 at 20 °C
pH Range	7.8 - 8.0 at 25 °C
Conductivity Range	58.5 - 58.9 mS at 25 °C

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