

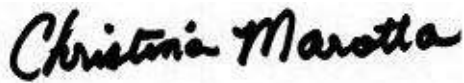
MP Biomedicals, LLC29525 Fountain Parkway
Solon, Ohio 44139Telephone: 440/337-1200
Toll Free: 800/854-0530Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: D-Mannitol
Catalog Number: 102248
Lot: M3152**Formula:** $C_6H_{14}O_6$
CAS #: 69-65-8
Physical Description: Fine White Powder**Formula Weight:** 182.17
Storage: Room Temperature

Test	Specification	Result
Identity Test	Passes	Passes
Purity	~99%	98.8%
Melting Point	163 - 172°C	166.0°C
Loss on Drying	≤1.0%	0.09%
Optical Rotation (c=1, ammonium molybdate, sulfuric acid)	+130 to +150°	137.8°

Arsenic: <0.030 ppm
Reducing Sugars: Conforms
Chloride: <12 ppm
Sulfates: <8 ppm
Acidity: 0.07 mls
PSD on 100 mesh: 1.40%
PSD on 200 mesh: 73.2%
PSD on 325 mesh: 18.5%
Reducing Sugars: Conforms
Foreign Matter: Absent
Conductivity: 1 μ mhos/cm
Clostridium Reducer Sulphite: Absent/2 g
E. coli & Enterbacter: Absent/g
Fecal Coliform: Absent/g
Osmophilics: 10 cfu/g
Samonella & S. aureus: Absent/5 g
Coliform: Absent
Total Count of Mesofile Bacteria: <10 cfu/g
Yeast & Mold: 10 cfu
Pseudomonas aeruginose: Absent/10 g
pH: 5.7
Lead: <0.030 ppm
Nickel: <0.030 ppm
IR: Passes
Red Sugar: 12.8
Water (KF): 0.03%



01/12/2012 - Christina Marotta
MP Biomedicals, LLC.
Technical Director

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<mailto:biotech@mpbio.com>
<http://www.mpbio.com>

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