Mannitol, Powder BAKER ANALYZED® A.C.S. Reagent





Material No.: 2554-01 Batch No.: 0000015204 Manufactured Date: 2011/07/05 Retest Date: 2016/07/03

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

| Test | Specification | Result |
|--|--------------------|----------|
| ACS – Specific Rotation [Å] ²⁵ ^D (+) | 23.3 – 24.3 Degree | 23.8 |
| ACS – Insoluble Matter | <= 0.01 % | < 0.01 |
| ACS – Loss on Drying at 105°C | <= 0.05 % | < 0.01 |
| ACS – Residue after Ignition | <= 0.01 % | < 0.01 |
| ACS – Titrable Acid (meq/g) | <= 0.0008 | < 0.0001 |
| ACS – Reducing Sugars | Passes Test | PT |
| Trace Impurities - ACS - Heavy Metals (as Pb) | <= 5 ppm | < 3 |

For Laboratory, Research, or Manufacturing Use

Country of Origin: FR Packaging Site: Paris Mfg Ctr & DC



Phillipsburg, NJ 9001:2008, 14001:2004 Paris, KY 9001:2008 Mexico City, Mexico 9001:2008 Deventer, The Netherlands 9001:2008, 14001:2004, 13485:2003 Gliwice, Poland 9001:2008, 17025:2005 Selangor, Malaysia 9001:2008, 14001:2004, 13485:2003 Mumbai, India, 9001:2008, 14001:2004, 13485:2003 Panoli, India 9001:2008

NUM Sac

Richard M Siberski Global Director of Quality Assurance

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.573.2600 Avantor ™ Performance Materials Inc.

3477 Corporate Parkway. Suite #200. Center Valley, PA 18034. U.S.A. Phone: 610.573.2600 . Fax: 610.573.2610