MATERIAL SAFETY DATA SHEET

SECTION I NAME
Product: D-Mannitol
Chemical Synonyms: Manna Sugar, Mannite
Formula: C6H14O6
Unit Size: up to 2.5 Kg.
C.A.S. No.: 69-65-8

SECTION II INGREDIENTS OF MIXTURES
Principal Component(s): D-Mannitol
%: 100%
TLV Units: None established.

WARNING! HARMFUL IF SWALLOWED. MAY CAUSE IRRITATION.
MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR.

SECTION III PHYSICAL DATA
Melting Point (°F): 167°C (333°F)
Boiling Point (°F): 290-295°C (554-563°F)
Vapor Pressure (mm Hg): N/A
Vapor Density (Air=1): N/A
Solubility in Water: 1 gram/5.5 ml of water
Appearance & Odor: White crystalline powder; no odor.

SECTION IV FIRE AND EXPLOSION HAZARD DATA
Flash Point (Method Used): 149°C (300°F)
Flammable Limits in Air % by Volume: Lower N/A
Extinguisher Media: Water spray; carbon dioxide (CO2); dry chemical (ABC).

SPECIAL FIREFIGHTING PROCEDURES
In fire conditions, wear a NIOSH/MSHA approved self-contained breathing apparatus and protective clothing.
Auto-ignition temperature: Dust cloud 460°C (860°F)

UNUSUAL FIRE AND EXPLOSION HAZARDS
Fire or excessive heat may produce hazardous decomposition products; can react vigorously with oxidizing materials. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

SECTION V HEALTH HAZARD DATA
Threshold Limited Value: OSHA PEL: 15 mg/m³ total dust, 5 mg/m³ respirable fraction for nuisance dusts.

Effects of Overexposure: INHALATION: May cause respiratory tract irritation. SKIN: May cause irritation and discoloration of skin.
INGESTION: May cause gastric irritation, nausea, diarrhea. Large doses produce vomiting, chills, dizziness, chest pain, heart failure and pulmonary edema. Target organs: None known.

Emergency and First Aid Procedures: INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.
EYES: Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.
SKIN: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.
INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION VI REACTIVITY DATA
Stability: Unstable
Conditions to Avoid: Excessive temperature, ignition sources.
Incompatibility (Materials to Avoid): Strong oxidizers

SECTION VII SPILL OR LEAK PROCEDURES
Steps to be taken in case material is released or spilled: Recover for use if not contaminated. Avoid creating dust conditions. Sweep up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Waste Disposal Method: Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.

SECTION VIII SPECIAL PROTECTION INFORMATION
Respiration Protection (Specify Type): None needed in normal laboratory handling. If dusty conditions prevail, wear a NIOSH/MSHA approved dust mask or respirator.
Ventilation: Local Exhaust: None needed. Special: Recommended. Other: No.
Protective Gloves: Recommended.
Eye Protection: Chemical safety goggles.
Other Protective Equipment: Eye wash station, lab coat, face shield, ventilation hood, class B extinguisher.

SECTION IX SPECIAL PRECAUTIONS
Precautions to be Taken in Handling & Storing: Store in a cool, dry place away from strong oxidizers, ignition sources. Wash thoroughly after handling.
Other Precautions: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.
Use with adequate ventilation. Remove and wash contaminated clothing.

Revision No. 2 Date: 01/12/07 Approved: James A. Bertsch
Chemical Safety Coordinator: JAB

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. * Hazardous Materials Industrial Standards. Printed on recycled paper.