MATERIAL SAFETY DATA SHEET

SECTION I  NAME

Product  LACTOSE
Chemical Synonyms  Milk Sugar
Formula  C_{12}H_{22}O_{11}•H_{2}O
Unit Size  up to 2.5 Kg.
C.A.S. No.  64044-51-5

SECTION II  INGREDIENTS OF MIXTURES

Principal Component(s)  %  TLV Units
Lactose  100%  None established.

CAUTION!

SECTION III  PHYSICAL DATA

Melting Point (°F) 202°C (395°F) dec.
Boiling Point (°F) N/A
Vapor Pressure (mm Hg) N/A
Vapor Density (Air=1) 1.56
Solubility in Water 20 grams per 100 gram water at 20°C.
Appearance & Odor  White powder; no odor.

SECTION IV  FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used) Non-flammable.
Flammable Limits in Air  Lower  Upper
% by Volume Unknown

Extinguisher Media  Water spray; carbon dioxide; foam.

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus. Use flooding amounts of water in early stages of fire. Auto-ignition temperature: 788°F (420°C).

UNUSUAL FIRE AND EXPLOSION HAZARDS

Dust dispersed in air becomes explosive when exposed to ignition source. Fire or excessive heat may produce hazardous decomposition products; can react vigorously with oxidizing materials.

SECTION V  HEALTH HAZARD DATA

Threshold Limited Value  None established by ACGIH 2001.

Effects of Overexposure

EYES:  No specific hazard known. However, any material that contacts the eye may be irritating.  SKIN:  May cause possible irritation. 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. Lift 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 temperatures or heat.

Incompatibility (Materials to Avoid)  Strong oxidizers.

Hazardous Decomposition Products  Not applicable.

Hazardous Polymerization Conditions to Avoid  Not applicable.

SECTION VII  SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled  Sweep up and place in suitable container for reclaimation or 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. Dispose of in an approved incinerator or if uncontaminated, material may be disposed of in a sanitary landfill.

SECTION VIII  SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)  None needed in normal laboratory handling. If dusty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved dust mask.

Ventilation  Local Exhaust: Not needed. Special Equipment: No.
  Mechanical (General): Not needed. Special Equipment: No.

Protective Gloves  Not needed.  Eye Protection  Chemical safety glasses.

Other Protective Equipment  Eye wash station, ventilation hood, lab coat.

SECTION IX  SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing  Store in a cool, dry place away from strong oxidizing agents. 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.

Remove and wash contaminated clothing.

Revision No. 7  Date 01/12/07  Approved James A. Bertsch  Chemical Safety Coordinator JAB

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