DESCRIPTION: Odorless, colorless, crystalline or fine white powder.

PHYSICAL DATA:
- Density: 1.5 g/cm³
- Melting point: 150°C
- Boiling point: 180°C
- Solubility: Slightly soluble in water, soluble in ethanol, ether.

HAZARD CLASSIFICATIONS:
- Health hazard: Not considered hazardous
- Fire hazard: None
- Reactivity hazard: None

Exposure limits:
- Short-term exposure limit: 10 mg/m³
- Long-term exposure limit: 2 mg/m³

Stability:
- Stable under normal storage conditions.

Incompatibilities:
- Avoid contact with strong oxidizing agents.

Fire-fighting:
- Use dry chemical, CO₂, or alcohol-resistant foam.
- Avoidcontact with water.

Health effects:
- Inhaled: No specific health effects reported.
- Ingested: No specific health effects reported.

Precautions:
- Avoid inhalation of dust or vapor.
- Wear appropriate personal protective equipment.

Storage:
- Store in a cool, dry place.
- Keep away from direct sunlight.

Disposal:
- Dispose of according to local regulations.

Toxicological information:
-LD₅₀ oral: >5000 mg/kg
-LD₅₀ dermal: >5000 mg/kg
- LC₅₀ airborne: >5000 mg/m³

Chemical name: Lactose monohydrate
CAS number: 57-50-1

Material safety data sheet

[This is a sample of how the document would appear if readable.]
LACTOSE:  
TOXICITY DATA: 1500 MG/KG INTRAVENOUS-DOG LD50; REPRODUCTIVE EFFECTS DATA (RTCS); TUMORIGENIC DATA (RTCS).  
CARCINOGEN STATUS: NONE.  
ACUTE TOXICITY LEVEL: INSUFFICIENT DATA.  
TARGET EFFECTS: NO DATA AVAILABLE.  

HEALTH EFFECTS AND FIRST AID  

INHALATION:  
LACTOSE:  
ACUTE EXPOSURE- NO DATA AVAILABLE.  
CHRONIC EXPOSURE- NO DATA AVAILABLE.  

FIRST AID- REMOVE FROM EXPOSURE AREA TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, PERFORM ARTIFICIAL RESPIRATION. KEEP PERSON WARM AND AT REST. TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION IMMEDIATELY.  

SKIN CONTACT:  
LACTOSE:  
ACUTE EXPOSURE- NO DATA AVAILABLE.  
CHRONIC EXPOSURE- NO DATA AVAILABLE.  

FIRST AID- REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED AREA WITH SOAP OR MILD DETERGENT AND LARGE AMOUNTS OF WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.  

EYE CONTACT:  
LACTOSE:  
ACUTE EXPOSURE- NO DATA AVAILABLE.  
CHRONIC EXPOSURE- NO DATA AVAILABLE.  

FIRST AID- WASH EYES IMMEDIATELY WITH LARGE AMOUNTS OF WATER OR NORMAL SALINE, OCCASIONALLY LIFTING UPPER AND LOWER LIDS, UNTIL NO EVIDENCE OF CHEMICAL REMAINS (APPROXIMATELY 15-20 MINUTES). GET MEDICAL ATTENTION IMMEDIATELY.  

INGESTION:  
LACTOSE:  
ACUTE EXPOSURE- GASTROINTESTINAL DISTURBANCES MAY OCCUR IN PERSONS WITH LACTOSE INTOLERANCE.  
CHRONIC EXPOSURE- REPRODUCTIVE EFFECTS HAVE BEEN REPORTED IN ANIMALS.  

FIRST AID- TREAT SYMPTOMATICALLY AND SUPPORTIVELY. GET MEDICAL ATTENTION IMMEDIATELY. IF VOMITING OCCURS, KEEP HEAD LOWER THAN HIPS TO PREVENT ASPiration.  

REACTIVITY:  
STABLE UNDER NORMAL TEMPERATURES AND PRESSURES.  

INCOMPATIBILITIES:  
LACTOSE:  
OXIDIZERS (STRONG): FIRE AND EXPLOSION HAZARD.  
DECOMPOSITION:  
THERMAL DECOMPOSITION MAY RELEASE ACID SMOKE AND IRRITATING FUMES.  
POLYMERIZATION:  
HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES AND PRESSURES.  

STORAGE AND DISPOSAL  
OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING OF THIS SUBSTANCE. FOR ASSISTANCE, CONTACT THE DISTRICT DIRECTOR OF THE ENVIRONMENTAL PROTECTION AGENCY.  

**STORAGE**  
STORE AWAY FROM INCOMPATIBLE SUBSTANCES.  
CONDITIONS TO AVOID  
MAY BURN BUT DOES NOT IGNITE READILY. AVOID CONTACT WITH STRONG OXIDIZERS, EXCESSIVE HEAT, SPARKS, OR OPEN FLAME.  

SPILL AND LEAK PROCEDURES  
OCCUPATIONAL SPILL:  
SWEEP UP AND PLACE IN SUITABLE CLEAN, DRY CONTAINERS FOR RECLAMATION OR LATER
DISPOSAL: DO NOT FLUSH SPILLED MATERIAL INTO SEWER. KEEP UNNECESSARY PEOPLE AWAY.

PROTECTIVE EQUIPMENT

VENTILATION:
PROVIDE LOCAL EXHAUST OR GENERAL DILUTION VENTILATION SYSTEM.

RESPIRATOR:
HIGH LEVELS—SUPPLIED-AIR RESPIRATOR.
SELF-CONTAINED BREATHING APPARATUS.

FIREFIGHTING—SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

CLOTHING:
PROTECTIVE CLOTHING NOT REQUIRED. AVOID REPEATED OR PROLONGED CONTACT WITH THIS SUBSTANCE.

GLOVES:
PROTECTIVE GLOVES ARE NOT REQUIRED BUT RECOMMENDED.

EYE PROTECTION:
EMPLOYEE MUST WEAR SPLASH-PROOF OR DUST-RESISTANT SAFETY GOGGLES TO PREVENT EYE CONTACT WITH THIS SUBSTANCE.

EMERGENCY EYE WASH:
WHERE THERE IS ANY POSSIBILITY THAT AN EMPLOYEE'S EYES MAY BE EXPOSED TO THIS SUBSTANCE, THE EMPLOYER SHOULD PROVIDE AN EYE WASH FOUNTAIN WITHIN THE IMMEDIATE WORK AREA FOR EMERGENCY USE.

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