



Health	1
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet

Lactose, monohydrate MSDS

Section 1: Chemical Product and Company Identification

Product Name: Lactose, monohydrate

Catalog Codes: 45510, 46000, 46605, 46010, 46205, 46500, 46510, 46520, 46600, 46610, 46603, 46602, 46604, 46606, 46610, 46615, 46650, 44100, 44200, 44405, 44500, 44600, 44606, 44602, 44603, 44604, 44605, 44610, 44700, 44800, 45100, 45110, 45115, 45120, 45130, 45140, 45150, 45160, 45165, 44000, 44010, 44020, 44100, 44110, 44115, 44120, 44200, 44300, 44320, 44862, 40710, 40712, 40715, 40720, 47025, 40728, 40730, 40735, 45530, 46660, 45130, 45531, 45535, 45540, 46200, 46210, 46800, 46680, 46670, 46662, 46603, 45165, 45110, 45510

CAS#: 64044-51-5

RTECS: OD9625000

Synonym: 4-O-beta-D-Galactopyranosyl-D-glucose

Chemical Name: Lactose, Monohydrate

Chemical Formula: C₁₂H₂₂O₁₁.H₂O

Contact Information: Leprino Foods 1830 West 38th Ave Denver, CO 80211

Sales: 1-800- leprino

Section 2: Composition and Information on Ingredients

Composition:

Name:	CAS#:	% by Weight:
Lactose, monohydrate	64044-51-5	100

Toxicological Data on Ingredients: Not Applicable.

Section 3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

Potential Chronic Health Effects:

Carcinogenic Effects: Not Available.

Mutagenic Effects: Not Available.

Teratogenic Effects: Not Available.

Developmental Toxicity: Not Available.

Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4: First Aid Measures

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact: Wash with water. Seek medical attention if irritation develops. Cold water may be used.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion: Dairy allergen. Persons allergic to dairy must avoid exposure.

Serious Ingestion: Not available

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: 470°C (878°F)

Kst: 34 bar*m/s

Pmax: 4.7 bar

Flash Points: Not available

Flammable Limits: Not available

Products of Combustion: These products are carbon oxides (CO, CO₂).

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat.

Explosions Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat.

Risks of explosion of the product in presence of mechanical impact. Not available.

Risks of explosion of product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY Chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions: Keep away from heat. Keep away from sources of ignition. Empty containers pose a potential fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Keep away from incompatibles such as oxidizing agents. Dairy Allergen.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, use ventilation to keep exposure to dust, low.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Dust respirators. Boots. Gloves.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (white crystalline powder)

Powder Flow-ability Index: Free Flowing

Odor: Odorless

Taste: Not available.

Molecular Weight: 360.31 g/mole

Color: Not available.

pH (1% soln/water): Not available.

Boiling point: Not available.

Melting Point: 214°C (417.2°F)

Critical Temperature: Not available.

Specific Gravity: 1.525 (Water = 1)

Vapor Pressure: Not available.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 10000 mg/kg {Rat}.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Slightly hazardous in case of skin and eye contact (irritant), of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Ingestion: No known reactions. Lactose is a food product.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Bioegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal: No Special considerations.

Section 14: Transport Information

Dot Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations: No products were found.

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): This product is not classified according to the EU regulations. Not applicable.

HMIS (USA):

Health Hazard: 1

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (USA):

Health: 1

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves.

Lab Coat.

Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: June 23, 2008

Last updated: 2023

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes. In no event shall Leprino Foods be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Leprino Foods has been advised of the possibility of such damages.