

1. Product and Company Information

Product Name: Lactose
Product Number: Hilmar™ 5000, 5010, 5020, 5030, 5100, 5110, 5120, 5120IF
Brand: Hilmar Ingredients
Product Uses: Food Ingredient
Manufacturer: Hilmar Ingredients
8901 N. Lander Ave.
Hilmar, CA 95325
USA
Phone: 1-209-667-6076
FAX: 1-209-656-2557
Web: www.hilmaringredients.com

In case of emergency contact: 1-209-667-6076

2. Hazard Identification

Substance Classification: GUS Classification in accordance with 29 CFR 1910 (OSHA HCS) Combustible dust

GHS Label Elements – Hazard Pictograms: Not a hazardous substance or mixture

Signal Word: Warning

Hazards not otherwise covered by GHS: None

OSHA TWA: Irritant particulate – 15 mg/m³ total dust
ACGIH TWA: Irritant particulate – 10 mg/m³ total dust

3. Compositional Information on Ingredients

Substance / Mixture: 4-O-β-D-Galactopyranosyl-D-glucose

Chemical Name: Lactose Monohydrate

CAS Number: 64044-51-5

Component	Typical Amount	Hazard Status
Lactose Monohydrate	99.1	None
Protein	0.3	None
Moisture	0.3	None
Ash	0.3	None

4. First Aid Measures

- Swallowed: Product fit for consumption as food
- Inhaled: Minimize inhalation. If large amount inhaled move to fresh air. If breathing problems occur consult a physician
- Skin Contact: Wipe of excess, wash with clean water
- Eye Contact: Wash eyes extensively with clean water. If irritation persists see a physician.

5. Fire Fighting Measures

- Extinguishing Media: Use carbon dioxide, dry chemical, alcohol-resistant foam or water spray depending on requirements of surrounding conditions
- Hazards of Combustion: Non-combustible material. Any fine powder is susceptible to fire risk so keep away from combustion sources. Lactose dust, like all fine powders, is potentially explosive if present at high enough concentration.
- Advice for Firefighters: Wear appropriate PPE consistent with the requirements of the surrounding conditions

6. Accidental Release Measures

Personal Precautions, protective equipment and emergency procedures:

Spills can be cleaned up with a dustpan and broom or shovel. Water can be used to flush spill areas. Avoid the production of dust as it can produce an explosion hazard at high enough concentrations. Dispose of spilled material by approved solid waste disposal measures. See Section 8 for any necessary personal protective equipment.

- Environmental Precautions: Keep large quantities of this material from drains
- Methods and Materials for Containment: Keep in closed container for disposal.

7. Handling and Storage

- Safe Handling Precautions: Use a dust mask if handling large quantities. Always work in well ventilated areas to avoid buildup of dust
- Safe Storage Conditions: Store at ambient temperature in closed containers located in well ventilated areas

8. Exposure Controls and Personal Protection

Control Parameters

Components with workplace control parameters: Does not contain components with occupational exposure limits

Engineering Controls: Use in areas with adequate ventilation

Personal Protective Equipment

Eye / Face Protection: Safety glasses are recommended to minimize dust exposure

Skin Protection: Protective gloves are recommended

Respiratory Protection: Respiratory protection is not required. Use of a nuisance dust mask, type OV/AG (US), is recommended

Environmental Protection: Keep large quantities of product from drains

9. Physical and Chemical Properties

Physical State:	Solid
Appearance:	White powder
Odor:	No Data
pH:	4.0-7.0
Vapor Pressure:	No Data
Boiling Point:	No Data
Melting Point:	No Data
Flash Point:	No Data
Evaporation Rate:	No Data
Flammability:	May form combustible dust concentrations in air
Bulk Density:	No Data
Density:	No Data
Viscosity:	No Data
Solubility:	Soluble in water at ambient temperature
Corrosion Rate:	No Data
Decomposition Temperature:	No Data
Auto-ignition Temperature:	No Data
Partition Coefficient (Octanol/Water):	No Data
Explosive Properties:	May for combustible dust concentrations in air
Oxidizing Properties:	No Data

10. Stability and Reactivity

Reactivity:	No data available
Chemical Stability:	Stable under recommended storage conditions
Possibility of Hazardous Reactions:	No data available
Conditions to Avoid:	Extreme heat
Incompatible Materials:	Avoid strong oxidizing agents
Hazardous Decomposition Products:	Hazardous decomposition products are not produced

11. Toxicological Information

Acute Toxicity:	No data
Inhalation:	No data
Dermal:	No data
Skin Irritation:	No data
Eye Damage / Eye Irritation:	No data
Respiratory or Skin Sensitization:	No data
Germ cell Mutagenicity:	No data

Carcinogenicity:

IARC: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

ACGIH: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH

NTP: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP

OSHA: No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA

Reproductive Toxicity:	No data
Specific Target Organ Toxicity – Single Exposure:	No data
Specific Target Organ Toxicity – Repeated Exposure:	No data
Aspirational Hazard:	No data

Additional Information:

RTECS – Not available

12. Ecological Information

Toxicity:	No data
Persistence and degradability:	No data
Bioaccumulative Potential:	No data
Mobility in Soil:	No data
Results of PBT and vPvB Assessment:	PBT/vPvB assessment not available as chemical safety assessment not required / not conducted
Other Adverse Effects:	No data

13. Disposal Considerations

Incinerate or dispose in sanitary landfill as per local, state and federal regulations

14. Transport Information

Proper Shipping Name (DOT-US, IMDG, IATA):	Lactose monohydrate
DOT (US):	Not dangerous goods
IMDG:	Not dangerous goods
IATA:	Not dangerous goods

15. Regulatory Information

SARA 302 Components:

This material does not contain any chemical components that are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:

This material does not contain any chemical components that are subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazards: No SARA hazards

Massachusetts Right to Know Components:

No chemical components are subject to the Massachusetts Right to Know Act

Pennsylvania Right to Know Components:

Lactose monohydrate CAS-No. 64044-51-5

New Jersey Right to Know Components:

Lactose monohydrate CAS-No. 64044-51-5

California Prop. 65 Components:

This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm

16. Other Information

HMIS Rating:

Health Hazard:	0
Chronic Health Hazard:	0
Flammability:	0
Physical Hazard:	0

NFPA Rating:

Health Hazard:	0
Fire Hazard:	0
Reactivity Hazard:	0

Preparation Information:

Hilmar Cheese Company
1-209-667-6076

Version 2.0

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Headquarters & Innovation Center

8901 North Lander Avenue, P.O. Box 910, Hilmar, CA 95324 USA T: 209.667.6076 Fax: 209.634.1408 hilmarcheese.com

California Manufacturing Site & Visitor Center: 9001 North Lander Avenue, P.O. Box 910, Hilmar, CA 95324 USA T: 209.667-6076

Texas Manufacturing Site: 12400 US Highway 385, P.O. Box 1300, Dalhart, TX 79022 USA T: 806.244.8800