

A Division of Spectrum Chemical Mfg. Corp.

Dear Customer,

# This File Contains Both The ANSI Material Safety Data Sheet and The GHS Safety Data Sheet For The Same Product

Spectrum is currently transitioning all chemical product labeling from the ANSI format to the GHS format (see note below). In order to ensure that you receive complete labeling during the transition, we have included both the ANSI MSDS and the GHS SDS in a single file. The ANSI MSDS is given first, followed by the GHS SDS. Please use whichever matches the container label.

#### Why It Matters:

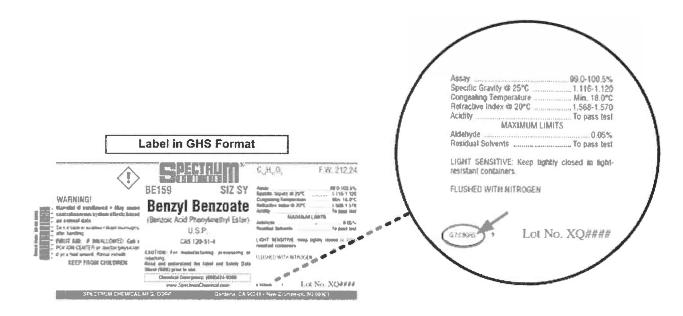
The complete precautionary labeling for this chemical consists of BOTH the label on the container AND the matching Material Safety Data Sheet (for ANSI labels) or Safety Data Sheet (for GHS labels). Both elements of the labeling [Label + (M)SDS] are written to be read and understood together, so as to provide complete precautionary information. It is intended for you to read and understood BOTH before handling or using the chemical.

# <u>Picking the Right One</u>: 2 Easy Ways To Tell Whether Your Container Has an ANSI Label or a GHS Label

- 1) GHS labels: any pictogram displayed in the upper left-hand corner will be inside a red diamond. ANSI labels: pictograms, if present, will be inside individual black boxes.
- 2) GHS labels: on the bottom of the right-hand panel of the label, locate the Lot Number. Directly to the left will be a string of control characters, followed by a single letter. For GHS labels, the string of characters will end in "GHS:"



CORPORATE OFFICES
14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843



<sup>&</sup>lt;sup>1</sup> American National Standards Institute

Sincerely,

**Regulatory Affairs** 

<sup>&</sup>lt;sup>2</sup> Globally Harmonized System for Hazard Communication





## SAFETY DATA SHEET

Preparation Date: 2/16/2015 Revision Date: 02/16/2015 Revision Number: G1

**Product identifier** 

Product code: LA105

Product Name: LACTOSE, MONOHYDRATE, SPRAY-DRIED POWDER, NF

Other means of identification

**Synonyms:** 4-O-beta-D-Galactopyranosyl-D-glucose monohydrate

D-(+)-Lactose monohydrate

CAS #: 64044-51-5 RTECS # OD9625000 CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use:
Uses advised against
No information available.
No information available

**Supplier:** Spectrum Chemicals and Laboratory Products, Inc.

14422 South San Pedro St. Gardena. CA 90248

(310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone numberChemtrec 1-800-424-9300Contact Person:Martin LaBenz (West Coast)Contact Person:Ibad Tirmiz (East Coast)

#### 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### Label elements

#### Warning

May form combustible dust concentrations in air

#### Hazards not otherwise classified (HNOC)

Not Applicable

Product code: LA105

Product name: LACTOSE, MONOHYDRATE, SPRAY-DRIED POWDER, NF 1/11

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Lactose, Monohydrate	64044-51-5	100	*
64044-51-5			

#### 4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centres in each State capital city can provide additional

assistance for scheduled poisons (13 1126)

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. Get medical attention if irritation develops. Consult a physician if necessary.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms

persist, call a physician.

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Get medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms Health injuries are not known or expected under normal use.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

#### 5. FIRE-FIGHTING MEASURES

#### **Extinguishing Media**

Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Water spray mist or

foam.

**Unsuitable Extinguishing Media:**No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon oxides

Specific hazards: May be combustible at high temperatures. Avoid generating

dust. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust

explosion hazard.

Product code: LA105 Product name: LACTOSE,

MONOHYDRATE, SPRAY-DRIED

POWDER, NF

#### **Special Protective Actions for Firefighters**

Specific Methods: No information available.

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

#### **6. ACCIDENTAL RELEASE MEASURES**

#### Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes

and clothing. Remove all sources of ignition. Avoid dust formation. Avoid dispersal of dust in the air. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Nonsparking tools should be used.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not flush into surface water or

sanitary sewer system.

Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up**Sweep up and shovel into suitable containers for disposal. Use only non-sparking

tools. Clean contaminated surface thoroughly.

#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Minimize dust generation and accumulation. Avoid dust formation. Dry powders can build static electricity charges when subjected to friction of transfer and mixing operations. All equipment used when handling the product must be grounded. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from incompatible materials.

#### Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

#### Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

#### **Incompatible Materials:**

Oxidizing agents.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control parameters**

National occupational exposure limits

Product code: LA105 Product name: LACTOSE,
MONOHYDRATE, SPRAY-DRIED

POWDER, NF

#### **United States**

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
	None	None	None	None
Lactose, Monohydrate - 64044-51-5				

#### Canada

Components	Alberta	British Columbia	Ontario	Quebec
	None	None	None	None
Lactose, Monohydrate - 64044-51-5				

#### **Australia and Mexico**

Components	Australia	Mexico
Lactose, Monohydrate	None	None
64044-51-5		

#### Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment) It is recommended that all dust control equipment such as local exhause ventilation and material transport systems involved in the handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment

#### Individual protection measures, such as personal protective equipment

#### **Personal Protective Equipment**

Eve protection: Goggles. Safety glasses with side-shields.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Effective dust mask. Wear respirator with dust filter.. Respiratory protection:

Avoid contact with skin, eyes and clothing. Wash hands and face before breaks and Hygiene measures:

immediately after handling the product. When using, do not eat, drink or smoke.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Appearance: Solid. Crystalline powder. White.

Odor: Taste Formula:

No information available C12H22O11•H2O Odorless.

Molecular/Formula weight: Flash point (°C): Flashpoint (°C/°F): No data available No information available. 360.31

Flash Point Tested according to: **Lower Explosion Limit (%): Upper Explosion Limit (%):** 

Not available No information available No information available

Autoignition Temperature (°C/°F): :Ha Melting point/range(°C/°F):

470°C/878°F No information available 202-214°C/396-417.2°F

Boiling point/range(°C/°F): Decomposition temperature(°C/°F): **Bulk density:** 

No information available No information available No information available

Specific gravity: Vapor pressure @ 20°C (kPa): Density (g/cm3):

No information available No information available No information available

Vapor density: VOC content (g/L): **Evaporation rate:** No information available No information available No information available

Partition coefficient Odor threshold (ppm): **Viscosity:** 

No information available (n-octanol/water): No information available

No information available

Miscibility: Solubility: Soluble in Water No information available

#### 10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents

Chemical stability

Stable at normal conditions Stability:

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

Conditions to avoid: Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust

dispersed in air in sufficient concentrations, and in the presence of an ignition source

is a potential dust explosion hazard. Incompatible materials.

**Incompatible Materials:** Oxidizing agents.

Hazardous decomposition products: Carbon oxides.

Other Information

Product code: LA105

Corrosivity: No information available Special Remarks on Corrosivity: No information available

#### 11. TOXICOLOGICAL INFORMATION

Product name: LACTOSE, MONOHYDRATE, SPRAY-DRIED

POWDER, NF

#### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

#### **Principal Routes of Exposure:**

Ingestion. Inhalation.

#### **Acute Toxicity**

#### **Component Information**

Lactose, Monohydrate - 64044-51-5

LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No infomation available

Other LD50 or LC50information = No information available

#### **Product Information**

LD50/oral/rat =

**VALUE- Acute Tox Oral =** No information available

LD50/oral/mouse =

Value - Acute Tox Oral = No information available

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat

**VALUE -Acute Tox Dermal =** No information available

LC50/inhalation/rat

VALUE-Vapor = No information available VALUE-Gas = No information available VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

Product code: LA105

VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

**Symptoms** 

**Skin Contact:** May cause skin irritation.

**Eye Contact:** May cause eye irritation.

InhalationMay cause irritation of respiratory tract.IngestionNot expected to be a health hazard.

Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Prolonged or repeated ingestion of very large amounts may cause hypermotility and

diarrhea

Sensitization: No information available

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic

	Components	ACGIH -	IARC	NTP	OSHA HCS -	Australia - Prohibited	Australia - Notifiable
	-	Carcinogens			Carcinogens	Carcinogenic	Carcinogenic
		_			_	Substances	Substances
Ī	_actose, Monohydrate	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity No data is available

Reproductive Effects:

Developmental Effects:
No information available
No information available
No information available

**Specific Target Organ Toxicity** 

STOT - single exposure
STOT - repeated exposure
Target Organs:

No information available
No information available

#### 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

**Ecotoxicity effects:** No data available.

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

#### 13. DISPOSAL CONSIDERATIONS

#### **Disposal Methods**

#### Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

#### Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Lactose, Monohydrate	None	None	None	None

#### 14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated

**Proper Shipping Name:** No information available **Hazard Class:** No information available

Subsidiary Risk: Not applicable

Packing Group: None

**ERG No:** No information available

Marine Pollutant No data available

**DOT RQ (lbs):** No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
No information available

**ADR** 

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Packing Group:
Subsidiary Risk:
Classification Code:
Description:
No information available

**IMO / IMDG** 

UN-No: Not Regulated

**Proper Shipping Name:** No information available **Hazard Class:** No information available **Subsidiary Risk:** No information available **Packing Group:** No information available **Description:** No information available **IMDG Page:** No information available No information available **Marine Pollutant** No information available MFAG: **Maximum Quantity:** No information available

RID

Product code: LA105

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Classification Code:
Description:
No information available

#### 14. TRANSPORT INFORMATION

#### **ICAO**

Not Regulated UN-No:

**Proper Shipping Name:** No information available **Hazard Class:** No information available **Subsidiary Risk:** No information available No information available **Packing Group: Description:** No information available

#### **IATA**

UN-No: Not Regulated

**Proper Shipping Name:** No information available **Hazard Class:** No information available **Subsidiary Risk:** No information available **Packing Group:** No information available **Description:** No information available

#### 15. REGULATORY INFORMATION

#### International Inventories

Components	U.S. TSCA	KOREA KECL		Japan ENCS	CHINA	Australia	EINECS-No.
			(PICCS)			(AICS)	
Lactose, Monohydrate	Not Listed	Not present	Present	Not present	Present	Present	Not present

#### U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

#### Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

#### Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive	Female Reproductive
			Toxicity	Toxicity:
Lactose, Monohydrate	Not Listed	Not Listed	Not Listed	Not Listed

#### **CERCLA/SARA**

•	CERCLA - Hazardous Substances and their Reportable Quantities	Hazardous	Hazardous	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Lactose, Monohydrate	None	None	None	None	None

#### **U.S. TSCA**

•	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Lactose, Monohydrate	Not Applicable	Not Applicable

#### Canada

Product code: LA105

Product name: LACTOSE, MONOHYDRATE, SPRAY-DRIED 9/11

#### WHMIS hazard class:

Non-controlled

#### **Canada Controlled Products Regulation:**

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

#### Inventory

Components	Canada (DSL)	Canada (NDSL)
Lactose, Monohydrate	Not Listed	Not Listed

(	Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Manditory	
			Reporting	
Ī	_actose, Monohydrate	Not listed	Not listed	

#### **EU Classification**

#### R-phrase(s)

not determined

#### S -phrase(s)

none

Components	Classification	Concentration Limits:	Safety Phrases
Lactose, Monohydrate		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

#### Indication of danger:

None.

### **16. OTHER INFORMATION**

**Product code: LA105** 

#### 16. OTHER INFORMATION

Preparation Date:2/16/2015Revision Date:02/16/2015Prepared by:Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet** 





# **Material Safety Data Sheet**

NFPA	HMIS	Personal Protective Equipment
10	Health Hazard  Fire Hazard  1	
	Reactivity	See Section 15.

Section 1. Chem	ical Product and Company Identification		Page Number: 1		
Common Name/ Trade Name	Lactose, monohydrate	Catalog Number(s).	YY1430, YY907, L1015, L1037, LA105, LA106		
		CAS#	64044-51-5		
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC.	RTECS	OD9625000		
	14422 S. SAN PEDRO STREET GARDENA, CA 90248	TSCA	TSCA 8(b) inventory: No products were found. Exempt from TSCA 8(b)		
			Inventory Listing since it is a hydrate.		
Commercial Name(s)	Not available.	CI#	Not available.		
Synonym	4-O-beta-D-Galactopyranosyl-D-glucose	IN CASE OF	EMERGENCY		
Chemical Name	Lactose, Monohydrate		(24hr) 800-424-9300		
Chemical Family	Not available.	CALL (310) 5	16-8000		
Chemical Formula	C12H22O11.H2O				
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248				

			Exposure Limits		
Name	CAS#	TWA (mg/m³)	STEL (mg/m³)	CEIL (mg/m³)	% by Weight
1) Lactose, monohydrate	64044-51-5				100

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.		

Lactose, monohydrate	Page Number: 2
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Section 4. First Aid Measures			
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.			
Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.			
Not available.			
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.			
Not available.			
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.			
Not available.			

Section 5. Fire and E.	xplosion Data
Flammability of the Product	May be combustible at high temperature.
<b>Auto-Ignition Temperature</b>	470℃ (878 <b>F</b> )
Flash Points	Not available.
Flammable Limits	Not available.
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of heat.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the 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.

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 fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.		
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23℃ (73.4年).		

Section 8. Exposure Controls/Personal Protection			
<b>Engineering Controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.		
<b>Personal Protection</b>	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	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.		
<b>Exposure Limits</b>	Not available.		

Section 9. Physical and Chemical Properties				
Physical state and appearance	Solid. (white crystalline powder)	Odor	Odorless.	
Molecular Weight	360.31 g/mole	Taste	Not available.	
pH (1% soln/water)	Not available.	Color	Not available.	
<b>Boiling Point</b>	Not available.			
Melting Point	214℃ (417.2℉)			
Critical Temperature	Not available.			
Specific Gravity	1.525 (Water = 1)			
Vapor Pressure	Not applicable.			
Vapor Density	Not available.			
Volatility	Not available.			
Odor Threshold	Not available.			
Water/Oil Dist. Coeff.	Not available.			
Ionicity (in Water)	Not available.			
<b>Dispersion Properties</b>	See solubility in water.			
Solubility	Partially soluble in cold water, hot water.			

Section 10. Stability and Reactivity Data			
Stability	The product is stable.		
<b>Instability Temperature</b>	Not available.		
<b>Conditions of Instability</b>	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.	
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 10000 mg/kg [Rat].	
<b>Chronic Effects on Humans</b>	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.		
<b>Products of Biodegradation</b>	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

Section 14. Transport Information		
DOT Classification		
Identification	Not applicable.	
Special Provisions for Transport	Not applicable.	
DOT (Pictograms)		

## Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations	No products were found.
Canforma Proposition 65 Warnings	California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
	California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.
Other Regulations	

## Continued on Next Page

## Lactose, monohydrate Page Number: 5 EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances. Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non- Domestic Substance List (NDSL). China: Listed on National Inventory. Japan: Not listed on National Inventory (ENCS). Korea: Not listed on National Inventory (KECI). Philippines: Listed on National Inventory (PICCS). Australia: Listed on AICS. Not controlled under WHMIS (Canada). **Other Classifications** WHMIS (Canada) DSCL (EEC) This product is not classified Not applicable. according to the EU regulations. Health Hazard **HMIS (U.S.A.)** 1 **National Fire Protection** Flammability **Association (U.S.A.)** Fire Hazard 1 Health Reactivity Reactivity 0 Specific hazard **Personal Protection** E WHMIS (Canada) (Pictograms) **DSCL** (Europe) (Pictograms) TDG (Canada) (Pictograms) ADR (Europe) (Pictograms) **Protective Equipment** Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Section 16. Other Information		
MSDS Code	L3010	
References	Not available.	
Other Special Considerations	Not available.	
Validated by Sonia Owen on 10/25/2010.		Verified by Sonia Owen. Printed 10/25/2010.

Page Number: 6

## Notice to Reader

CALL (310) 516-8000

Lactose, monohydrate

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.