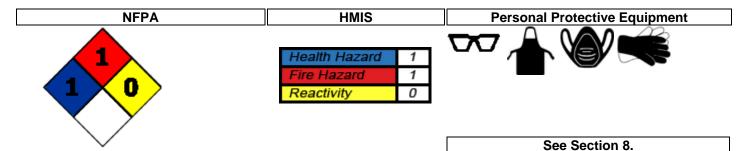




MATERIAL SAFETY DATA SHEET

L



1. CHEMICAL PRODUCT A	ND COMPANY IDENTIFICATION
Product code:	A3237
Product Name:	L-ARABINITOL
Chemical Name:	L-Arabinitol
Synonyms:	L-(-)-Arabitol
Recommended use:	No information available.
CAS #:	7643-75-6
Formula:	C5-H12-O5
RTECS #	Not available
CI#:	Not available
Supplier:	Spectrum Chemicals and Laboratory Products, Inc.
	14422 South San Pedro St.
	Gardena, CA 90248
	(310) 516-8000
Emergency Telephone Number:	CHEMTREC: 1-800-424-9300
Contact Person:	Martin LaBenz (West Coast)
Contact Person:	Chris Terpak (East Coast)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW May cause skin and eye irritation. May cause irritation of respiratory tract.			
Physical state: Solid.	Appearance: Powder	Color: White.	
	use skin and eye irritation. Ma Physical state:	use skin and eye irritation. May cause irritation of respiratory Physical state: Appearance:	

OSHA Regulatory Status

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 1910.1200)

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure: Ingestion. Inhalation.

Acute Potential Health Effects:

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Inhalation: May cause irritation of respiratory tract.

Ingestion:

Expected to be a low hazard. May cause digestive (gastrointestinal) tract irritation.

Chronic Potential Health Effects:

Target Organs:	No information available
Carcinogen Status:	No information available
Mutagenic Effects:	No information available
Teratogenic Effects:	No information available
Aggravated Medical Conditions:	No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
L-Arabinitol	7643-75-6	100

4. 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.
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 breathing is difficult, give oxygen. In case of shortness of breath, give oxygen. Get medical attention.

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Notes to Physician:

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F):	No information available.	
Tested according to: Not applicable		
Lower Explosion Limit (%):	No information availab	le
Upper Explosion Limit (%):	No information availab	le
Autoignition Temperature (°C/°F): No information available		
Suitable Extinguishing Media:		Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.
Unsuitable Extinguishing Media:		No information available.
Hazardous Combustion Products:		Carbon monoxide; Carbon dioxide
Specific hazards:		May be combustible at high temperatures.
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
Specific Methods:		No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental Precautions:

No information available ..

Methods for Cleaning Up:

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. 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.

Storage

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 Products:

Oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineerin	g measures to reduce		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.	
Personal P	rotective Equipment			
Eye p	protection:	Safety glasses. Safety glasses with side-shields.		
Skina	and body protection:	Long sleeved clothing. C	hemical resistant apron. Gloves.	

- **Respiratory protection:** Wear respirator with dust filter.
- **Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

National occupational exposure limits

United States

U.S Occupational Exposure Limits: Not determined

Canada

Canada Occupational Exposure Limits: Not determined

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

9. PHYSICAL AND CHEMICAL PROPERTIES

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.

Odor: No information available

Flash point (°C): Not determined

Autoignition Temperature (°C/°F): No information available

Melting point/range(°C/°F): 101-104 °C/214-291 °F

Density (g/cm3): No information available

Vapor density: No information available

Odor threshold (ppm): No information available

Solubility: Soluble in Water Appearance: Powder

Taste No information available

Lower Explosion Limit (%): No information available

pH: No information available

Decomposition temperature(°C/°F): No information available

Bulk density: No information available

Evaporation rate: No information available

Partition coefficient (n-octanol/water): No information available Color: White.

Molecular/Formula weight: 152.15

Upper Explosion Limit (%): No information available

Boiling point/range(°C/°F): No information available

Specific gravity: No information available

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Miscibility: No information available

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions
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.
Materials to avoid:	Strong oxidising agents.
Hazardous decomposition products:	Carbon monoxide. Carbon dioxide.
Possibility of Hazardous Reactions:	No information available
Polymerization:	Hazardous polymerisation does not occur
Corrosivity:	No information available
Special Remarks on Corrosivity:	No information available

11. TOXICOLOGICAL INFORMATION Acute Toxicity

Component Information

L-Arabinitol - 7643-75-6 LD50/oral/rat = No information available LD50/oral/mouse = No information available LD50/dermal/rabbit = Not determined LD50/dermal/rat = No information available LC50/inhalation/rat = No information available LC50/inhalation/mouse = No information available Other LD50 information No information available

Product Information

LC50/inhalation/rat = No information available LC50/Inhalation/mouse = No information available LD50/dermal/rabbit = No information available LD50/dermal/rat = Not information available LD50/oral/rat = No information available LD50/oral/mouse = No information available

Local Effects

Skin irritation:	May cause skin irritation.
Eye irritation:	Contact with eyes may cause irritation.
Inhalation:	May cause irritation of respiratory tract.
Ingestion:	May cause digestive (gastointestinal) tract irritation.
Sensitization:	No information available
Chronic Toxicity	
Chronic Toxicity	No information available
Carcinogenic effects:	Not considered carcinogenic
Mutagenic Effects:	No information available
Reproductive Effects:	No information available
Teratogenic Effects:	No information available
Target Organs:	No information available

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: No information available		
Ecotoxicity effects:	No data available	
Aquatic toxicity:	No information available	e
Mobility:	No information available	e
Persistence and degradability:	No information available	e
Bioaccumulative potential:	No information available	e

13. DISPOSAL CONSIDERATIONS

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

L-Arabinitol None None None None	Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
	L-Arabinitol	None	None	None	None

14. TRANSPORT INFORMATION

DOT

DOT	UN-No: Proper Shipping Name: Hazard Class: Packing Group: Subsidiary Risk: Marine Pollutant ERG No: DOT RQ (Ibs):	Not regulated No information available No information available None Not applicable No data available No information available No information available
TDG	(Canada) Proper Shipping Name:	No information available
	UN-No:	Not regulated
	Hazard Class:	No information available
	Packing Group:	No information available
	Subsidiary Risk:	No information available No information available
	Description:	No information available
ADR		
	Proper Shipping Name:	No information available
	UN-No:	Not regulated
	Hazard Class:	No information available
	Packing Group:	No information available
	Subsidiary Risk: Classification Code:	No information available No information available
	Description:	No information available
	CEFIC Tremcard No:	No information available
IMO	/ IMDG	
	Proper Shipping Name:	No information available
	UN-No: Hazard Class:	Not regulated No information available
	Subsidiary Risk:	No information available
	Packing Group:	No information available
	Description:	No information available
	IMDG Page:	No information available
	Marine Pollutant	No information available
	MFAG:	No information available
	Maximum Quantity:	No information available
RID		
	Proper Shipping Name:	No information available
	UN-No:	Not regulated
	Hazard Class:	No information available
	Packing Group:	No information available
	Subsidiary Risk:	No information available
	Classification Code:	No information available

Description:	No information available
ICAO UN-No: Hazard Class: Proper Shipping Name: Packing Group: Subsidiary Risk:	Not regulated No information available No information available No information available No information available
Description:	No information available
IATA Proper Shipping Name: UN-No: Hazard Class: Packing Group: Subsidiary Risk:	No information available Not regulated No information available No information available No information available
Description:	No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
L-Arabinitol	Present	Not present	Not present	Not present	Present	Present	231-582-6

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcment 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 Toxicity	Female Reproductive Toxicity:
L-Arabinitol	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

	CERCLA - Hazardous Substances and their Reportable Quantities	Hazardous	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
L-Arabinitol	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
L	-Arabinitol	Not Applicable	Not Applicable

Canada

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)
L-Arabinitol	Not Listed	Present

EU Classification

R -phrase(s) not determined

S -phrase(s)

none

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

Indication of danger: Not dangerous

16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1-2004 standards.

Preparation Date	01-Dec-2010
Reason for revision:	Not applicable
Prepared by:	Sonia Owen
Literature reference:	No information available

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. The physical properties reported in this MSDS 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 MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.