

Life Sciences Advanced Technologies, Inc.

Material Safety Data Sheet

This document is currently available in English only.

Section 1: Product and Company Identification

Product Name/Description: **Trehalose Dihydrate**

Supplier: Life Sciences Advanced Technologies, Inc. (727) 345-9371
2900 72nd Street North (800) 237-4323
St. Petersburg, FL 33710 USA

Emergency Contact: Contact your local poison control center

Catalog Number: TDH-033

Section 2: Composition/Information on Ingredients

<u>CAS #</u>	<u>Component</u>	<u>Percentage</u>	<u>Exposure Limits</u>
6138-23-4	Trehalose Dihydrate	$[C_{12}H_{22}O_{11} \cdot 2H_2O] \geq 99\%$	Unknown

PEL = OSHA Permissible Exposure Limit TLV = ACGIH Threshold Limit Value TWA = Time Weighted Average

Section 3: Hazards Identification

US Precautionary Labeling: WARNING – May cause eye and skin irritation. Do not get in eyes, on skin or clothing. Keep containers closed. Wash thoroughly after handling.

International Labeling: May be irritating to eyes and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves.

Health Hazards:

Skin Contact: Contact may cause irritation.

Eye Contact: Contact may cause irritation.

Carcinogen Status: None of the components of this product are listed as a carcinogen or suspected.

Section 4: First Aid Measures

Skin Contact: Rinse the contact area thoroughly with water.

Eye Contact: Immediately flush eyes with large amounts of water while holding the eyelids open to assure that the entire surface is flushed.

Section 5: Fire Fighting Measures

Flash point (method used): None

Autoignition Temp: None

Flammable Limits: Not Applicable

Extinguishing Media: Use any media appropriate for the surrounding fire.

Special Fire Fighting Procedures: This material is not flammable. If a fire occurs in the surrounding area, use an extinguishing media appropriate to the fire conditions. A water spray may be used.

Unusual Fire and Explosion Hazards: None

Hazardous Combustion Products: Not Applicable

Section 6: Accidental Release Measures

Wear protective equipment (gloves and safety glasses). Isolate spill area. Place in a container for disposal. Wash spill area with a detergent solution.

Section 7: Handling and Storage

Follow good laboratory practices of avoiding contact (breathing, touching, smoking, eating, drinking, etc.) with a laboratory reagent. Avoid contact with the skin and eyes. Wash thoroughly with soap and water after handling. Do not eat, drink or smoke in the area of use. Use disposable gloves and handle materials as if potentially infectious in accordance with "Universal Precautions for Prevention of Transmission of Human Immunodeficiency Virus, Hepatitis B Virus, and Blood borne Pathogens in Health-Care Setting" (CDC, MMMWR, June 24, 1988).

Store in a tightly closed container. Store this product at Room Temperature (25±5°C).

Section 8: Exposure Controls/Personal Protection

Ventilation: General laboratory ventilation should be adequate.

Respiratory Protection: None should be needed.

Gloves: Impervious gloves should be worn.

Eye Protection: Standard laboratory safety goggles.

Other Protection: Protective clothing (such as a lab coat) can be worn to prevent skin contact.

Section 9: Physical and Chemical Properties

Appearance and Odor: White crystalline powder **Melting Point:** 97°C

Water Solubility: 68.9g/100g-water (20°C)

Section 10: Stability and Reactivity

Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: None known

Incompatibility: None known

Hazardous Decomposition Products: None known

Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

Irritancy to Product: Possible physical irritation because of crystalline structure of product similar to sugar. Not a known chemical irritant.

Mutagenicity: No mutagenicity reported. Standardized mouse micronucleus and CHO chromosome aberration assays performed.

Acute Toxicity: No toxicity was observed in male or female mice given a single dose of 21.5g/kg.bw of product in distilled water by oral administration.

Subacute Toxicity: A no-toxic-effect was reported after 30 days in feed of mice (100g/kg.bw.d).

Sperm Malformation: The male and female mice were fed a maximum dose of product (100g/kg.bw.d) for 5 days. There was no significant difference on the rates of sperm malformation between product and negative control groups.

Section 12: Ecological Information

This material is a highly safe compound that is enzymatically produced from starch similar to glucose or corn syrup. It is found naturally in insects, plants, and organisms such as mushrooms and baker's yeast. It has a long history on consumption by humans.

Section 13: Disposal Considerations

Waste Disposal Method: Dispose of product in accordance with all local, state/provincial and federal regulations. Dispose of all used materials as bio-hazardous waste.

Container Disposal: Empty containers should be collected for proper disposal.

Section 14: Transport Information

US DOT Hazard Classification

Proper Shipping Name: Not Regulated

Technical Name: Trehalose Dihydrate

UN Number: Not Applicable

Hazard Class/Packing Group: Not Applicable

Labels Required: None

DOT Packaging Requirements: Not Applicable

Exceptions: Not Applicable

IATA/ICAO AIR TRANSPORTATION

Proper Shipping Name: Not Regulated

Technical Name: Trehalose Dihydrate

UN Number: Not Applicable

Hazard Class/Packing Group: Not Applicable

Labels Required: None

IATA Packaging Requirements: Not Applicable

Comment: Not Applicable

Section 15: Regulatory Information

Not Applicable

Section 16: Other Information

NFPA Hazard Rating: Health: 0 Fire: 0 Reactivity: 0

Revision Summary: New Product

No materials of human origin are used in the composition or preparation of this product. Observe routine bio-safety procedures in handling this product, and consider all used materials as potentially infectious.

Previous Revision Date: none Current Revision Date: 30October2006

The above information is believed to be correct as of the date of this sheet, but does not purport to be all inclusive and shall be used only as a guide. Since the use of this information and the conditions of use of the product are not within the control of Life Sciences, Inc., it is the user's obligation to assure safe use of the product.