

Life Sciences Advanced Technologies  
2900 72<sup>nd</sup> Street N. St Petersburg, FL 33710  
(727) 345-9371 [www.lifesci.com](http://www.lifesci.com)

## Material Safety Data Sheet

This document is currently available in English only.

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### Section 1: Product and Company Identification

**Product Name/Description:** **Trehalose Dihydrate**  
**Supplier:** Life Sciences Advanced Technologies (727) 345-9371  
2900 72<sup>nd</sup> Street North (877) 387-1639  
St. Petersburg, FL 33710 USA  
**Emergency Contact:** Contact your local poison control center  
**Catalog Number:** TDH-033, TDH-039

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### Section 2: Composition/Information on Ingredients

CAS #	Component	Percentage	Exposure Limits
6138-23-4	Trehalose Dihydrate [C <sub>12</sub> H <sub>22</sub> O <sub>11</sub> · 2 H <sub>2</sub> O]	>=99%	Unknown

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

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### 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.

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### 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.

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### 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

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### 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.

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### 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 Bloodborne Pathogens in Health-Care Setting" (CDC,MMWR,June 24,1988).

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

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### Section 8: Exposure Controls/Personal Protection

<b>Ventilation:</b>	General laboratory ventilation should be adequate.
<b>Respiratory Protection:</b>	None should be needed.
<b>Gloves:</b>	Impervious gloves should be worn.
<b>Eye Protection:</b>	Standard laboratory safety goggles.
<b>Other Protection:</b>	Protective clothing (such as a lab coat) can be worn to prevent skin contact.

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### Section 9: Physical and Chemical Properties

<b>Appearance and Odor:</b>	White crystalline powder	<b>Melting Point:</b> 97°C
<b>Water Solubility:</b>	68.9g/100g-water (20°C)	

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### Section 10: Stability and Reactivity

<b>Stability:</b>	Stable under normal temperatures and pressures.
<b>Conditions to Avoid:</b>	None known
<b>Incompatibility:</b>	None known
<b>Hazardous Decomposition Products:</b>	None known
<b>Hazardous Polymerization:</b>	Will not occur.

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### Section 11: Toxicological Information

<b>Irritancy to Product:</b>	Possible physical irritation because of crystalline structure of product similar to sugar. Not a known chemical irritant.
<b>Mutagenicity:</b>	No mutagenicity reported. Standardized mouse micronucleus and CHO chromosome aberration assays performed.
<b>Acute Toxicity:</b>	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.
<b>Subacute Toxicity:</b>	A no-toxic-effect was reported after 30 days in feed of mice (100g/kg.bw.d).
<b>Sperm Malformation:</b>	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.

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### 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.

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**Waste Disposal Method:** **Section 13: Disposal Considerations**  
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.

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**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

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**Section 15: Regulatory Information**

Not Applicable

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**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.

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**Previous Revision Date:** 30 Oct 2006 **Current Revision Date:** 8 Mar 2011

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.

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TDH-039-10G, TDH-039-50G, TDH-039-250G,

TDH-039-1KG, TDH-039-5KG, TDH-039-10KG

Initiated: 8 March 2011. Previous revision 30 Oct 2006

Revision: 1