

## SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
OSHA 29 CFR 1910.1200

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**Product Name/Description:** 1.0 M Trehalose Dihydrate Solution  
**Catalog Number:** AMS.TS1M-100 AMS.TS1M-500 AMS.TS1M-1L  
**Emergency Contact:** Contact your local poison control center  
**Supplier:** AMSBIO

**SECTION 2: HAZARDS IDENTIFICATION**

**Precautionary Labeling:** WARNING – May cause eye, skin and respiratory irritation. May be rapidly absorbed through the skin. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves. Unpleasant odor.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<u>CAS #</u>	<u>Component</u>	<u>Percentage</u>	<u>Exposure Limits</u>
6138-23-4	Trehalose Dihydrate	33.49%	Unknown
	Water	66.51%	N.A.

**SECTION 4: FIRST AID MEASURES**

**Skin Contact:** Immediately remove contaminated clothing. Wash the contact area thoroughly with soap and water for 15 minutes. Get medical attention if irritation or symptoms develop. If skin is broken, or material enters a wound, seek medical attention. Discard contaminated clothing.

**Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open to assure that the entire surface is flushed.

**SECTION 5: FIRE FIGHTING MEASURES**

**Flash Point (method used):** None  
**Autoignition Temperature:** None  
**Flammable Limits:** Not applicable  
**Extinguishable Media:** Carbon dioxide, dry chemical powder or appropriate foam.

Revision Date: 2 Jul 20

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<b>Special Fire Fighting Procedures:</b>	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.
<b>Unusual Fire and Explosion Hazards:</b>	None
<b>Hazardous Combustion Products:</b>	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 specimens and materials that contact specimens 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, MMMWR, June 24, 1988).

Store in a tightly closed container. Store this product at Room Temperature (25+/-5C).

## **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.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance and Odor:</b>	Clear, colorless, odorless solution
<b>Melting Point:</b>	N.A.
<b>Water Solubility of Trehalose Dihydrate:</b>	68.9 g/100g-water (20C)

## **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.

**Hazardous Polymerization:** Will not occur.

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

**Irritancy of Product:** Possible physical irritation because of crystalline structure of solute 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 21.5 g/kg body weight of solute in distilled water by oral administration.

**Subacute Toxicity:** A non-toxic-effect was reported after 30 days in feed to mice (100 g of solute/kg bw d).

**Sperm Malformation:** The male and female mice were fed a maximum dose of product (100 g of solute/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 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 of 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**

N.A.

**SECTION 16: OTHER INFORMATION**

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

**Prepared by:** Sal Syed, PhD, Design Control Scientist, Life Sciences Advanced Technologies, Inc.

**Previous Revision Date:** 15 Mar 10

**Disclaimer:**

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.

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 Advanced Technologies, Inc., it is the users obligation to assure safe use of the product.

**Revision Date: 2 Jul 20**

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