



Trehalose, Dihydrate

Safety Data Sheet

According to Regulation (EC) 1272/2008

SECTION 1 - Chemical Product and Company Identification

1.1 Product Identifiers

Product Name: : Trehalose, Dihydrate
 CAS #: : 6138-23-4
 EC #: : 612-140-5
 RTECS #: : Not Available

1.2 Recommended Use of the Chemical and Restrictions of Use

Chemical manufacturing

1.3 Supplier Details

Supplier BioSpectra, Inc. 100 Majestic Way
 Bangor, PA 18013
 T: 610.599.3400
 ehs@biospectra.us

1.4 Emergency Numbers

Emergency number: US & Canada: 1-800-424-9300
 Outside the US & Canada: +1 703-527-3887

SECTION 2 – Hazard Identification

2.1 Classification of Substance or Mixture

Not classified as a hazard per GHS & Regulation (EC) 1272/2008

2.2 GHS Label Elements Including Precautionary Statements

No information available

2.3 Hazards not Classified or not Covered by the GHS

No information available

SECTION 3 – Composition, Information on Ingredients

Component	Classification	Concentration
Trehalose, Dihydrate	Not Hazardous	98-100%

Synonyms : α -D-Glucopyranosyl- α -D-glucopyranoside
 EC Number : 612-140-5
 CAS Number : 6138-23-4
 Molecular Formula : $C_{12}H_{22}O_{11} \cdot 2H_2O$
 Molecular Weight : 378.33 g/mol

The information contained herein is the confidential property of BioSpectra. The recipient is responsible for its safe-keeping and the prevention of unauthorized appropriation, use, disclosure and copying.

SECTION 4 – First Aid Measures

4.1 Description of Necessary First Aid Measures

Ingestion	:	Rinse mouth with water. DO NOT induce vomiting, unless instructed to do so. Contact a physician
Inhalation	:	Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and contact a physician
Eyes	:	Flush eyes with plenty of tepid water for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lens, if present and able to do so. Contact a physician if irritation develops.
Skin	:	Flush with plenty of tepid water for at least 15 minutes. Contact a physician if irritation persists.

4.2 Most Important Symptoms/Effects, Acute and Delayed

Refer to Section 2.2 for Precautionary Statements

4.3 Indication of Immediate Medical Attention and Special Treatment

Treat symptomatically and supportively.

SECTION 5 - Firefighting Measures

5.1 Extinguishing Media

Water spray, dry powder, foam, or Carbon Dioxide

5.2 Specific Hazards Associated with this Chemical

Carbon Oxides

5.3 Special Equipment/Precautions for Firefighters

As with any fire, wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

5.4 Other Information

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Explosion will appear as fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

SECTION 6 - Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use Personal Protective Equipment as indicated in Section 8. Ensure adequate ventilation, avoid breathing dust. Avoid dust formation.

6.2 Environmental Precautions

Do not allow to enter drains

6.3 Methods and Materials for Containment and Cleaning Up

Remove all sources of ignition. Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

6.4 Other Information

Refer to protective measures listed in Section 8 & 13.

SECTION 7 - Handling and Storage

7.1 Precautions for Safe Handling

Provide appropriate exhaust ventilation at places where dust is formed.

The information contained herein is the confidential property of BioSpectra. The recipient is responsible for its safe-keeping and the prevention of unauthorized appropriation, use, disclosure and copying.

7.2 Conditions for Storage Including any Incompatibilities

Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

7.3 Other Information

No additional information available.

SECTION 8 - Exposure Controls, Personal Protection**8.1 Control Parameters**

Contains no substances with occupational exposure limit values

8.2 Engineering Controls

Local exhaust is recommended to keep employee exposures as low as possible.

8.3 Personal Protective Equipment**Eyes**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin

Wear appropriate protective gloves to prevent skin exposure. Wear impervious gloves.

Clothing

Wear appropriate protective clothing to prevent skin exposure

Respirators

Where protection from nuisance levels of dusts are desired, use type N95 (US) or P1 (EN143) dust masks. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

SECTION 9 - Physical and Chemical Properties

Physical State	: Solid
Appearance	: White Crystalline Powder
Odor	: Odorless
pH	: 4.5-6.5 @ 10% aq sol
Vapor Density	: Not Available
Viscosity	: Not Available
Boiling Point	: Not Available
Melting Point	: 207-210°F/97-99°C
Specific Gravity/Density	: Not Available
Solubility	: 50 g/L in Water (insoluble in ether)

SECTION 10 - Stability and Reactivity**10.1 Chemical Stability**

Stable under normal temperatures and pressures.

The information contained herein is the confidential property of BioSpectra. The recipient is responsible for its safe-keeping and the prevention of unauthorized appropriation, use, disclosure and copying.

10.2 Conditions to Avoid

Excess heat, dust generation, ignition sources, and incompatible materials

10.3 Incompatibilities with Other Materials

Strong oxidizers

10.4 Hazardous Decomposition Products

Not Available

10.5 Hazardous Polymerization

Will not occur.

SECTION 11 - Toxicological Information**11.1 Toxicological Effects**

LD50/LC50 Oral, rat	: Based on available data, the classification criteria are not met
Carcinogenicity	: Based on available data, the classification criteria are not met
Epidemiology	: Based on available data, the classification criteria are not met
Teratogenicity	: Based on available data, the classification criteria are not met
Reproductive Effects	: Based on available data, the classification criteria are not met
Neurotoxicity	: Based on available data, the classification criteria are not met
Mutagenicity	: Based on available data, the classification criteria are not met
Other Studies	: No Information Available

11.2 Additional Information

To the best of our knowledge the associated physical, chemical and toxicological properties of this chemical have not undergone thorough investigation, all known information is contained in this SDS.

SECTION 12 - Ecological Information**12.1 Ecotoxicity**

Based on available data, the classification criteria are not met

12.2 Persistence and Degradability

No information available

12.3 Bioaccumulative Potential

No information available

12.4 Mobility in Soil

No information available

12.5 Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other Adverse Effects

No information available

SECTION 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14 - Transport Information

Regulations	US DOT	IATA	IMDG	ADR
Shipping Name	Not a DangerousGood	Not a DangerousGood	Not a DangerousGood	Not a DangerousGood
Hazard Class				
UN Number				
Packing Group				

SECTION 15 - Regulatory Information**15.1 EHS Chemical Specific Regulations****SARA:**

Section 302	:	No components exceed the threshold reporting levels established by SARA title III, Section 302
Section 313	:	No components exceed the threshold reporting levels established by SARA title III, Section 313
SARA 311/312 Hazards	:	None known

STATE SPECIFIC:

Massachusetts Right to Know Components	:	No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right to Know Components	:	No components are subject to the Pennsylvania Right to Know Act.
New Jersey Right to Know Components	:	No components are subject to the New Jersey Right to Know Act.
California Prop. 65 Components	:	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

SECTION 16 - Additional Information**16.1 Hazard Ratings**

NFPA Rating	
Health hazard	1
Fire Hazard	1
Reactivity Hazard	0

HMIS Classification	
Health hazard	1
Flammability	1
Physical Hazards	0
Personal Protection	E

The information conveyed in this Safety Data Sheet is only a representation of what BioSpectra has found to be accurate based on the current information that is available in regards to this compound. BioSpectra makes no warranty, expressed or implied, with respect to such information, and therefore assumes no liability resulting from product usage. It is strongly recommended that users of this product perform their own investigations to determine the accuracy and suitability of the information for their specific purposes. In no way will BioSpectra assume liability for any claims, losses, damages to any third party, any lost profits or any special, indirect, incidental, consequential or exemplary damages that may arise, even if BioSpectra has been advised of the possibility of such damages.

The information contained herein is the confidential property of BioSpectra. The recipient is responsible for its safe-keeping and the prevention of unauthorized appropriation, use, disclosure and copying.