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## **Material Safety Data Sheet**

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### **1. Chemical Product and Company Identification**

Product Name	Inositol
Recommended Uses	Nourishment
Company	XI'AN HAOTIAN BIO-ENGINEERING TECHNOLOGY CO., Ltd
Post Code	710075
Telephone	86-29-88324612
Fax	86-29-88327715

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### **2. Hazards identification**

Classification of the substance or mixture, According to Regulation (EC)No 1272/2008.

This substance is not classified as dangerous according to GHS regulation (EC No1272/2008).If contact or inhale the powder/dust, may cause eyes,skin or respiratory system irritation.The toxicological properties of this material have not been fully investigated.

UN Hazard Class:None.

GHS Classification: None.

GHS label elements: None.

CLP in According with EC Directives: None.

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### **3. Composition/information on ingredients**

Synonyms	Inositol
Formula	C <sub>6</sub> H <sub>12</sub> O <sub>6</sub>
Molecular weight	180.16

**Synonymous Name** cis-1,2,3,5-trans-4-6-cyclohexanehexol;cyclohexanehexol;  
cyclohexitol;dambose;hexahydroxycyclohexane; 1,2,3,4,5,6-Hexa

hydroxycyclohexane;Inositol,myo-;Inositene;Inositina;inositine;  
Inosital;Iso-inositol;i-Inositol;Meatsugar;Mesoinosit;Mesoinosite;  
mesoinositol;meso-Inositol;mesovit;myo-inositol;Myoinosite;  
Nucite;phaseomannite;phaseomannitol;Scyllite.

CAS No. 87-89-8  
EC# 201-781-2

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#### 4. First Aid Measures

**Eyes:**Do not allow victim to rub eyes.In case of contact,immediately flush eyes with water for at least 15 minutes,occasionally lifting the upper and lower eyelids.Check for and remove any contact lenses if easily possible.Get medical aid if symptoms occur.

**Skin:**If a reaction with skin contact occurs,remove the contaminated clothing.Wash the affected area with soap and water.Laundry clothing before re-use.Get medical attention if irritation persists.

**Inhalation:**If breathing is difficult,give oxygen.Get medical aid if cough or other symptoms appear.

**Ingestion:**Get medical aid if symptoms occur.If a large amount is swallowed,induce vomiting under the guidance of professional doctors.If the injured is fully conscious:wash mouth out with water,and then give 2-4 cupfuls of milk or water.Never give anything by mouth to an unconscious person.

**Note To Physicians:**Treat symptomatically and supportively.

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#### 5. Fire-fighting measures

**Extinguishing Media:**Use water spray,dry chemical,carbon dioxide,or appropriate foam.

**Specific Hazards:**Non flammable.In case of a fire,oxides of carbon,hydrocarbons,fumes,and smoke may be generated by thermal decomposition.

**Specific Extinguishing Methods:**If appropriate,reduce airborne dust and prevent scattering



by moistening with water spray. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Run-off water from fire control should be contained to avoid pollution.

Protective Equipment: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

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## **6. Accidental Release Measures**

Person-related Safety Precautions: Ventilate closed spaces before entering. Review Section 5 and 7 sections before proceeding with clean-up. Use proper personal protective equipment as indicated in Section 8.

Measures for Environmental Protection: DO NOT let this chemical enter the environment.

Measures for Cleaning/Collecting: Remove all sources of ignition. Stop leak if possible without personal risk. Sweep up material carefully, and then place into a suitable disposal container for disposal. Avoid generating dusty conditions. If appropriate, moisten first to prevent dusting. Contaminated floor may be flushed with water to chemical sewer.

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## **7. Handling and Storage**

General Information: This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Smoking should be prohibited in areas where this material is handled, stored and processed. Wash hands thoroughly after handling chemical products.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances, sources of ignition or heat, food, drink, direct sunlight and dust/impurities. Protect from humidity and water. Inspect regularly for deficiencies such as damage or leaks. Treat carefully, avoid physical damage to containers. The storage area should be equipped with the corresponding species and quantity of fire equipment and leakage emergency equipment.

Handling: Ensure good local exhaust ventilation. Handle and open container with care. Keep



container tightly closed and away from incompatible substances, sources of ignition or heat, food, drink, direct sunlight and dust/impurities. Protect from humidity and water. Minimize dust generation and accumulation. Avoid dust contact with eyes, skin and clothing. Avoid ingestion and inhalation. Remove contaminated clothing and shoes. Remove contaminated clothing and wash before reuse. Empty containers retain product residue. The work area before should be equipped with the corresponding species and quantity of fire equipment and leakage emergency equipment.

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## **8. Exposure Controls, Personal Protection**

Exposure Limit: No exposure limits is listed for this product. But nuisance dust limits can be used for this product.

Composition: Nuisance dust

- TLV-TWA 10 mg/m<sup>3</sup> (ACGIH, total)
- TLV-TWA 3 mg/m<sup>3</sup> (ACGIH, respirable fraction)
- PEL- TWA 15mg/m<sup>3</sup> (OSHA, total)
- PEL- TWA 5mg/m<sup>3</sup> (OSHA, respirable fraction)

Monitoring Methods: No information found.

Engineering Controls: Use adequate ventilation to keep airborne concentrations low. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment:

- Eyes: Dust service goggles should be worn to prevent mechanical injury or other irritation to eyes due to airborne particles which may result from handling product.
- Skin and Clothing: Wear appropriate protective clothing, and gloves to prevent skin contact.
- Respirators: An appropriate respirator or mask should be used whenever workplace conditions warrant a respirator's use. A full face positive pressure supplied-air respirator or a self contained breathing apparatus should be used when large spilled or fire.



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- Other Protection: To maintain good health habits. Smoking should be prohibited in areas where this material is handled, stored and processed. Wash hands thoroughly after handling chemical products.

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## 9. Physical and Chemical Properties

Physical State: White powder.

Odor: Weak odor

PH: Approx. 7 at 1g/ml water

Flash Point: N/A

Boiling Point: N/A

Melting point: 224-227°C

Relative density(water=1): N/A

Relative density(air=1): N/A

Vapor pressure: N/A

Vapour density: N/A

Octanol/water distribution coefficient: N/A

Viscosity: N/A

Ignition Temperature(°C): Approx. 800°C

Explosion Limits[%(V/V)]: N/A

Decomposition Temperature: N/A

Flammability: The preliminary screening test for readily combustible solids is conducted in accordance with the regulation (Recommendations on the transport of dangerous goods manual of tests and criteria), so the product does not belong to flammability solid.

Solubility in water: Approx. 1g/6ml at 25°C, i.e. highly soluble.

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## 10. Stability and Reactivity

Chemical Stability: Stable under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, sources of ignition or heat, dust



generation,excess heat,mositure.

Incompatibilities with Other Materials:Strong oxidizing agents.

Hazardous Decomposition Products:Decomposition will not occur if handled and stored properly.In case of a fire,oxides of carbon,hydrocarbons,fumes,and smoke may be generated by thermal decomposition.

Hazardous Polymerization:Will not occur.

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## **11. Toxicological Information**

Toxicological Information:

Composition:CAS#87-89-8

- RTECS#NM7520800
- LD50 (mg/Kg) :Oral,mouse 11000

Sensitization Rate:Not available.

Carcinogenicity:

Composition: CAS#87-89-8

- Not listed as a carcinogen by ACGIH,IARC,NTP,or CA Prop 65.

Potential Health Effects:

- Eye:Contact with power/dust may cause eyes irritation.
  - Skin:Prolonged or repeated contact with power/dust may cause skin irritation.
  - Ingestion:May causes gastrointestinal irritation if taken in large quantities.
  - Inhalation:If inhaled power/dust,may cause respiratory tract irritation.
  - Other Information:The toxicological properities of this material have not been fully investigated.
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## **12. Ecological Information**

Ecological Toxicity:Not available.

Persistence and degradability: Not available.

Bioaccumulative Potential: Not available.



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Mobility in Soil: Not available.

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### **13. Disposal Considerations**

The generation of waste should be avoided or minimized wherever possible. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

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### **14. Transport Information**

Not regulated as a hazardous material for transportation. (TDG; IMDG CODE; IATA DGR)

UN Number: N/A

UN Proper Shipping Name: N/A

UN Classification: N/A

Packing Group: N/A

Packaging Sign: N/A

Transport Fashion: Cargo by air, by sea, by rail, by road.

Packaging Method: N/A

Packaging Information: N/A

Marline pollutant (Y/N): No.

Shipping Notice: During the process of shipping should ensure the integrity of the packaging, loading should be conservative, and must prevent sunshine, the rain and high-temperature.



## 15. Regulatory Information

Regulatory Information:Reference to the local,national,US,EU,CA and international regulations.

TSCA:CAS# 87-89-8 is listed.

TSCA Section 12b: CAS# 87-89-8 is unlisted.

SARA Section 302: CAS# 87-89-8 is unlisted.

SARA Section 313: CAS# 87-89-8 is unlisted.

DSL: CAS# 87-89-8 is listed.

OSHA: CAS# 87-89-8 is unlisted.

California Prop 65: CAS# 87-89-8 is unlisted.

IECSC: CAS# 87-89-8 is listed.

Other Information:

US:This substance is not listed in OSHA Hazard communication standard (29CFR 1910.1200,List of Highly Hazardous Chemicals,Toxics and Reactives)

EU:There is no information in ESIS for this substance with respect to the BPD.

This substance is not listed in the Annex I of Regulation (EC) No 689/2008(Export and Import of Dangerous Chemicals).

This substance is listed as LPV(Low Production Volume).

This substance is not listed in European Priority Lists and Risk Assessment(Council Regulation(EEC) No 793/93).

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## 16. Additional Information

This advice is given by Xi'an Hao Tian Bio-engineering Technology Co., Ltd. who accepts no legal liability for it. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.





Other Information:

ACGIH: (American Conference of Governmental Industrial Hygienists);  
CAS(Cheical Abstracts Service);  
CLP:(Classification, labeling and packaging);  
DSL(the Domestic Substances List of Canada);  
EC(European Commission);  
GHS:(Globally Harmonized System of Classification and Labelling of Chemicals);  
IARC:(International Agency for Research on Cancer);  
IATA:(International Air Transport Association);  
IECSC:(Inventory of Existing Chemical Substances in China);  
IMDG:(International Maritime Dangerous Goods);  
LD50:(Lethal dose, 50 percent kill);  
MAC:(Maximum allowable concentration);  
NDSL:(the Non-domestic Substances List of Canada);  
NOISH:(US National Institute for Occupational Safety and Health);  
NTP:(US National Toxicology Program);  
OSHA:(US Occupational Safety and Health);  
PEL:(Permissible Exposure Level);  
REL:(Recommended Exposure Limit);  
RTECS:(Registry of Toxic Effects of Chemical Substances);  
SARA:(Superfund Amendments and Reauthorization Act);  
STEL:(Short Term Exposure Limit);  
TDG:(Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations);  
TSCA:(Toxic Substances Control Act of USA);  
TWA:(Time Weighted Average);  
TLV:(Threshold Limit Value).