

MATERIAL SAFETY DATA SHEET

1. Chemicals and Corporate Identification

Product Name: Polyoxyethylene Isoalcohol Ether (HTO-6)

Company: Wuxi Hazzchem International Trade Co., Ltd.

Address: Luda Road, Loshe Town, Huishan District, Wuxi, China

Zip Code: 214185

Emergency Phone: (+86)18005180339

2. Hazards Identification

The product's hazard classification and labeling information are as follows:

> **Emergency Overview**

> **GHS Hazard Classification:**

Acute toxicity, oral (Category 4); H302

Severe eye injury/eye irritation (Category 1); H318

Acute (short-term) aquatic hazard (Category 2); H401

> **GHS Label Elements:**

Pictogram:



Signal Word: Hazard; Hazard Description:

H302: Harmful if ingested.

H318 caused severe ocular injury.

H401 is toxic to aquatic organisms

> **Precautionary Notes:**

P264. Thoroughly wash the skin after application.

P270: Do not eat, drink, or smoke while using this product.

P273 Avoid release into the environment.

P280: Wear protective goggles/mask.

> **Accident Response:**

P301+P312+P330: In case of accidental ingestion: If discomfort occurs, call emergency services/medical professionals. Rinse the mouth.

If P305+P351+P338+P310 enters the eyes: Rinse carefully with water for several minutes. If contact lenses are worn and can be easily removed, remove them. Continue rinsing. Immediately call emergency services/seek medical attention.

3. Composition/Information on Ingredients

Composition : Polyoxyethylene Isoalcohol Ether

CAS# : 9043-30-5

Active ingredients content: $\geq 99\%$

4. First aid measures

> Description of Emergency Measures:

General Recommendations.

Emergency measures are typically required; please present this SDS to the physician upon arrival at the scene.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes. Seek medical attention if discomfort occurs.

Skin contact: Immediately remove the contaminated clothing. Rinse the skin thoroughly with plenty of soap water and clean water. Seek medical attention if discomfort occurs.

Ingestion: Do not induce vomiting by ingestion; never administer any food or liquids orally to an unconscious individual. Immediately call a physician or the poison control center.

Inhalation: Upon inhalation, immediately move the patient to an area with fresh air and ensure unobstructed breathing. If dyspnea occurs, administer oxygen. If the patient ingests or inhales this substance, do not perform mouth-to-mouth resuscitation. If respiration ceases, initiate cardiopulmonary resuscitation (CPR) immediately. Seek medical attention promptly.

Protective measures for emergency personnel: ensure that healthcare workers understand the hazardous characteristics of the product and implement personal protective measures to safeguard themselves and prevent the spread of contamination.

>The most critical symptoms and impacts include acute and delayed manifestations:

1. Eliminate all ignition sources and enhance ventilation.
2. Avoid contact with skin and eyes.
3. Avoid inhaling vapors.
4. Wear protective equipment, including a respirator.

>Instructions for Emergency Medical Treatment and Special Management:

1. Provide targeted treatment based on the symptoms presented.
2. Note that symptoms may appear delayed.

5. Fire safety measures

>Firefighting medium:

Appropriate fire extinguishing media: dry powder, carbon dioxide, water spray, or alcohol-resistant foam.

Inappropriate fire extinguishing agents: Avoid using excessively strong water vapor to extinguish fires, as this may cause the flames to spread and disperse.

>The specific hazard derived from this substance or mixture:

1. The container may explode when heated.
2. Containers exposed to fire may leak their contents through pressure relief valves.
3. Heating or exposure to flames may cause expansion or explosive decomposition.>Recommendations for firefighters

>Recommendations for firefighters:

1. When extinguishing a fire, wear a respirator (compliant with MSHA/NIOSH requirements or equivalent) and a full-body protective suit.
2. Extinguish the fire at a safe distance with adequate protection.
3. Prevent firefighting water from contaminating surface and groundwater systems.

6. Leakage emergency response

>Protective measures for personnel, protective equipment, and emergency response procedures:

1. Ensure adequate ventilation. Eliminate all ignition sources.
2. Evacuate personnel quickly to a safe area, away from the leakage site and upwind of the contamination.

3. Wear personal protective equipment (PPE). Avoid inhaling vapors, smoke, gases, or dust.

>Environmental Protection Measures :

1. Under safe conditions, implement measures to prevent further leakage or spillage.

2. Avoid discharge into the surrounding environment.

>Methods for containing and cleaning up chemical leaks, along with the disposal materials used:

1. For minor leaks, dry sand or inert adsorbent materials can be used to absorb the leaked substances; for major leaks, a dike must be constructed for containment.

2. The collected or attached materials shall be stored in appropriate sealed containers and disposed of in accordance with local applicable laws and regulations.

3. Eliminate all ignition sources and use flame arrestors and explosion-proof equipment.

7. Handling and storage

>Operation Precautions:

1. Perform operations in a well-ventilated area.

2. Wear appropriate personal protective equipment (PPE).

3. Avoid contact with skin and entry into the eyes.

4. Keep away from heat sources, sparks, open flames, and hot surfaces.

5. Take measures to prevent the accumulation of static electricity.

>Storage Precautions:

1. Keep the container sealed.

2. Store in a dry, cool, and well-ventilated place.

3. Keep away from heat sources, sparks, open flames, and hot surfaces.

4. Store away from incompatible materials (contraindications: strong acids, strong bases, strong oxidizing agents, and isocyanates) and food containers.

8. Exposure controls/Personal protection

>Control parameters:

Occupational exposure limits – No data.

Biological limits – No data.

Monitoring method :

1. EN 14042 – Guidelines for assessing exposure to chemical or biological agents in workplace air.

2. GB Z/T160.1~GB Z/T 160.81-2004 Determination of Toxic Substances in Workplace Air (Series of Standards).

> Engineering Control:

1. Maintain adequate ventilation, especially in enclosed areas.

2. Ensure that eye-washing and shower facilities are available near the workplace.

3. Use explosion-proof electrical equipment, ventilation systems, lighting fixtures, and other relevant devices.

4. Establish emergency evacuation routes and necessary hazard evacuation zones.

>Personal Protective Equipment:

Eye Protection: Wear chemical goggles (compliant with EU EN 166 or US NIOSH standards).

Hand protection: Wear chemical-resistant gloves (e.g., butyl rubber gloves). It is recommended to use protective

gloves tested in accordance with the EU EN 374, US F739, or AS/NZS 2161.1 standards.

Respiratory Protection: If vapor concentrations exceed the occupational exposure limit or symptoms such as irritation occur, use a full-face multi-functional gas mask (US) or an AXBEK-type (EN14387) gas mask cylinder.

Skin and Body Protection: Wear flame-retardant and anti-static protective clothing along with anti-static protective boots.

9. Physical and chemical properties

Appearance: Colorless to pale yellow

liquid

pH Value: 5-7

Water content: $\leq 1\%$

OH Number (mgKOH/g) : 120 ± 5

10. Stability and reactivity

Stability: Stable

Conditions to avoid: Avoid Direct light, heat, flames, sparks and other sources of ignition. Fire-fighting facilities is necessary

Materials to avoid: Oxidizing agents, Isocyanates, acid

Hazardous decomposition products

No hazardous decomposition under normal operation.

11. Toxicological information

> Acute Toxicity:

Oral acute toxicity estimate – 500.1 mg/kg (Expert Opinion);

Inhalation: No data available;

LD50 percutaneous – female rats > 2,000 mg/kg (OECD Test Guideline 402);

> Skin corrosion/irritation:

Skin – rabbits: No skin irritation observed (OECD Test Guideline 404);

> Severe ocular injury/irritation:

Eyes – rabbits: Irreversible ocular effects observed (OECD Test Guideline 405);

> **Respiratory or skin allergy:** No data available;

> **Genotoxicity:** No data available;

> **Carcinogenicity:** No data available;

> **Reproductive toxicity:** No data available;

> **Specific target organ system toxicity (single exposure):** No data available;

> **Specific target organ system toxicity (repeated exposure):** No data available;

> **Inhalation hazards:** No data available.

12. Ecology Information

> Ecotoxicity:

Toxicity to fish – LC50 for *Leuciscus idus* (high-body Yalong fish): 10–100 mg/L – 96 h;

Toxicity to algae – EC50 for seaweed: 10–100 mg/L – 72 h. Note: (External MSDS)

> **Durability and Degradability:** Results indicate >60% biodegradability, indicating rapid biodegradation. (OECD Test Guideline 301B)

> **Bioaccumulation potential:** No data available

> **Migration in soil:** No data available

> **Evaluation of PBT and vPvB results:** The PBT/vPvB assessment is not available as chemical safety assessments were not required or conducted

> **Other environmental hazards:** No data available

13. Waste Disposal

Disposal of waste chemicals:

Prior to disposal, refer to relevant national and local regulations. Incineration is recommended as the disposal method.

Contaminated packaging material:

After emptying the packaging, residual hazards may still remain; keep away from heat and fire sources, and return the packaging to the supplier for reuse if possible.

Disposal Precautions:

See the "Waste Disposal" section.

14. Transport information

Transportation labels and markings: Not applicable to the United Nations Hazardous Goods Classification Number (UN No.).

Correct United Nations transportation name: Not regulated as hazardous goods transportation.

Main hazard category of transportation: None. Secondary hazard category of transportation: None.

Packaging category: -

15. Legal Information

> **International Chemical Directory**

components	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Polyoxyethylene Isoalcohol Ether	×	√	√	√	√	√	√	√	×

[EINECS]European List of Existing Chemicals

[TSCA]U.S. TSCA Chemical List

[DSL]Canadian Domestic Chemical List

[IECSC]China List of Existing Chemicals

[NZIoC]New Zealand List of Temporarily Used Chemicals

[PICCS]Philippine List of Chemicals and Substances

[KECI]South Korea List of Existing Chemicals

[AICS]Australia List of Existing Chemicals

[ENCS]Japan List of Existing and New Chemicals.

"√" indicates the substance is listed in the regulation,

while a "×" indicates no available data or absence from the regulation.

16. Other Sections

Version Date: 2023.3.1

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Guidance departments: Production run Department

Data audit department: Technology Center