

MATERIAL SAFETY DATA SHEET

1. Chemicals and Corporate Identification

Product Name: Castor oil polyoxyethylene ether (EL-20)

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

2.1 Classification of Substances or Mixtures

According to the Global Harmonized System of Classification of Chemicals (GHS Classification)

Harmful to swallowing (Chapter 3.2), H302

Causes skin irritation (Chapter 3.2), H315

Causes severe ocular irritation (Chapter 3.3), H319

Exhibits extremely high toxicity to aquatic organisms (Chapter 4.1), H400

2.2 GHS labeling elements:

tab:



Warning: Warning

Risk Statement:

H302 is harmful when ingested.

H315 causes skin irritation.

H319 causes severe eye irritation.

H400 is highly harmful to aquatic organisms.

Protection Statement:

After P264 treatment, thoroughly cleanse the skin.

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

P273 Avoid release into the environment.

P280 Wear goggles/ facial protection device.

P280 Put on protective gloves.

Protection Statement:

P301 + P312 + P330: In case of accidental ingestion, rinse the mouth immediately. If discomfort occurs, seek medical advice promptly.

After contact with P302+P352 on skin: Rinse thoroughly with plenty of soap and water.

P305+P351+P338: If entering the eyes: Rinse thoroughly with water for several minutes, remove the contact lens, and continue rinsing if possible.

P332+P313: In case of skin irritation: Seek medical attention.

P337+P313: If eye irritation persists, seek medical attention.

P362 Remove contaminated clothing, wash it, and then use.

P391 Collect the spillage.

P501 Send the collected materials/containers to an approved waste treatment facility.

2.3 Unclassified hazards not covered by GHS – None

3. Composition/Information on Ingredients

Composition : Castor oil polyoxyethylene ether

CAS# : 61791-12-6

Active ingredients content: $\geq 99.5\%$

4. First aid measures

Eye contact: In case of contact, flush eyes with plenty of water or saline water. Get medical attention

Skin contact: In case of skin contact, Immediately remove contaminated clothing and shoes. wash affected areas with soap and water for 15 min.

Ingestion: If ingested, drink plenty of warm water, vomit. Get medical attention.

Inhalation: If inhaled, remove to fresh air. Get medical attention.

5. Fire safety measures

The appropriate fire extinguishing agent

Applicable fire extinguishing agents: water, water mist, fire-resistant foam, dry powder, carbon dioxide, sand.

The danger of combustible materials

Harmful combustion products: carbon monoxide, carbon dioxide, nitrogen oxides.

Firefighters' Protective Equipment

Firefighters should be equipped with comprehensive personal protective gear, including positive-pressure self-contained breathing apparatus, protective clothing, protective footwear, and protective gloves, to prevent inhalation of potential toxic gases and irritating smoke. When safe to do so, remove the burning container and spray it with cold water to cool it, thereby minimizing the risk of explosion.

6. Leakage emergency response

Personal Protective Measures

Access to the isolation area is prohibited for non-essential personnel and those not wearing protective equipment.

Environmental Protection Measures

Prevent entry into land, sewage pipes, or waterways.

Methods for handling overflow and leakage

Absorb the spill using sand, soil, or any suitable absorbent, transfer it to a container for treatment, and rinse the spill area with water. Prevent the spilled material from entering sewers or public water pipelines.

7. Handling and storage

Procedure: Adhere to standard chemical safety precautions.

Storage: Store in sealed and dry packaging containers, avoiding contact with strong acids and isocyanates. Strictly avoid direct exposure to sunlight or rain.

Storage container materials: galvanized iron drums, plastic drums, etc.

Storage temperature: Room temperature.

Storage duration: up to 12 months.

8. Exposer controls/Personal protection

High concentration limit: not stated

Engineering Controls: Sealing operation is needed, Local exhaust ventilation is necessary

Personal Protective Equipment

Eye protection

Chemical safety goggles or safety glasses with side-shields.

Hand protection

Permeation resistant gloves.

Skin and body protection

None required under normal conditions of use.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product.

9. Physical and chemical properties

Appearance: Thick, brownish-yellow

liquid

pH Value: 5-7

Cloud Point (0.5% aq.): 43-54

Water content: $\leq 0.5\%$

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 toxic effects:**

Inhalation: Inhalation of degradation products may pose health risks.

Swallowing: May cause harm.

Skin contact: May cause skin allergic reactions.

Eye contact: No serious hazard.

Chronic toxicity or long-term toxic effects:

Skin contact: If an allergic reaction occurs, a more severe allergic reaction may occur upon subsequent exposure.

Carcinogenicity: No significant effect.

Numerical measure of toxicity:

LD50 orally-Rat->2000 mg/kg LD50 orally-Rat->2000 mg/kg

LD50 for skin – Rat ->2000 mg/kg LD50 for skin – Rat ->2000 mg/kg

12. Ecology Information

Difficult to biodegrade. Low bioaccumulation potential. Harmful to aquatic organisms with prolonged and persistent effects.

Ecotoxicity:

EC50 - germ - >100 mg/kg – 3-hour static test

EC50 -Water flea- >100 mg/kg – 48-hour static test

EbC50 -Algae- 46 mg/kg-72-hour static test

LC50 -Fish- > 100 mg/kg for 96 hours

NOEC -Algae- 12 mg/kg-72-hour static test

NOEC -Water Flea- 0.32mg/kg - 21 days

13. Waste Disposal

Waste disposal method:

Waste gas treatment shall comply with the relevant local, provincial, or national regulations.

matters need attention:

When using or handling empty containers, comply with the relevant government regulations.

14. Transport information

UN No.: Not specified

Packaging marking: Not required

Packaging method: Packaged in galvanized iron drums or plastic drums.

Transportation Precautions: Before transportation, ensure the packaging container is intact and sealed. During transit, prevent leakage, collapse, falling, or damage to the container. Strictly avoid mixing with oxidizers, acids, or food-grade chemicals. Transport vehicles and vessels must be thoroughly cleaned and disinfected; otherwise, they shall not carry other goods. For maritime transport, the loading area should be located away from bedrooms and kitchens, and isolated from engine rooms, power sources, and other ignition sources.

15. Legal Information

Legal Information: The following laws, regulations, and standards govern the safe use, storage, transportation, handling, classification, and management of chemicals.

Corresponding regulations have been established regarding aspects such as signage:

The series of standards for chemical classification, warning labels, and precautionary labeling specifications (GB 20576-2006 to GB 20602-2006).

List of Hazardous Chemicals: Not included.

List of Highly Toxic Chemicals: Not included.

List of Dangerous Goods (GB 12268-2012): Not included.

"China's List of Existing Chemical Substances": Included.

List of Highly Toxic Substances: Not included.

List of Hazardous Chemicals Subject to Explosion Control (2011 Edition): Not included.

List of Chemicals Suspected of Being Used in Drug Manufacturing: Not included.

"List of the First Batch of Key Hazardous Chemicals Subject to Strict Supervision": Not included.

Regulations on the Safety Management of Hazardous Chemicals (State Council Order No.591).

Additional information: EU Regulation

Determine the hazard classification and labeling of substances in accordance with EU Regulation 67/548/EEC and Regulation 1999/45/EC (including their amendments), taking into account the usage of existing products.

Dangerous label:

Irritant

Risk Description: R43-Skin contact may cause allergic reactions.

Safety Description: S24-Avoid skin contact.

S37 – Wear protective gloves.

16. Other Sections

Version Date: 2023.3.1

Version No.: 1.0/EN

Guidance departments: Production run Department

Data audit department: Technology Center

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