


# Safety Data Sheet

Date/Revised : Jan 1, 2022

## 1. Identification

Product Name: UN488
Other Names: —
Recommended use and restrictions on use: Environmentally friendly plasticizer
Names, addresses, and phone numbers of the manufacturer or supplier: ZHENJIANG UNION CHEMICAL INDUSTRY CO.LTD Addresses: NO.57 Lin Jiang West Road, Dagang,Zhenjiang New District,Jiangsu 212006, China Phone number: (86)-511-8336-2688 ; FAX(86)-511-8336-2700
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## 2. Hazard(s) identification

Product hazard classification : <ul style="list-style-type: none"> <li>◆ Acute toxicity, category 5 (oral) ;</li> <li>◆ Skin corrosion/irritation, category 3 (Mild Irritant) ;</li> <li>◆ Serious eye damage/eye irritation, category 2B (Mild Irritant) ;</li> <li>◆ Chronic hazards to the aquatic environment, category 1</li> </ul>
Labelling elements: <div style="text-align: center;">  </div> <p>Signal word : Warning</p> <p>Hazard statements :</p> <ul style="list-style-type: none"> <li>◆ May be harmful if swallowed ;</li> <li>◆ Causes mild skin irritation ;</li> <li>◆ Causes eye irritation ;</li> </ul>

- ◆ Very toxic to aquatic life with long lasting effects

Precautionary statements :

- ◆ No eating or drinking when using this material ;
- ◆ Wear eye mask/ face mask ;
- ◆ If the material contact with eyes, immediately flush affected eyes with plenty of water and get medical attention ;
- ◆ Avoid discharge into the environment.

Other hazards: —

### 3. Composition/information on ingredients

Substance:

Common name: Dioctyl Terephthalate

Synonyms: Bis(2-ethylhexyl) Terephthalate ; Di-isooctyl Terephthalate

Chemical Abstract Service (CAS) Registry Number: 6422-86-2

The hazardous ingredient (% of the content): 99.6 % W/W

### 4. First-aid measures

The first-aid instructions by relevant routes of exposure:

Inhalation:

- (1) Remove the patient to fresh air.
- (2) If patient is not breathing, give artificial respiration.
- (3) Keep patient warm and comfortable

Skin contact:

- (1) Remove contaminated clothing.
- (2) Flush affected areas with water and soap (or neutral detergent).
- (3) Get medical attention immediately.

Eye contact:

- (1) Immediately flush affected eyes with plenty of water for at least 15 minutes and hold eyelids apart while washing.
- (2) If irritation develops, get medical attention immediately.

Ingestion:

(1) Get medical attention immediately.
The most important symptoms and hazardous effects: Irritation
The protection of first-aider: Wear protective gloves to avoid contact with pollutants.
Notes to physicians: If patient swallow this material, consider gastric lavage or active carbon.

#### 5. Fire-fighting measures

Suitable extinguishing media: Carbon dioxide, dry chemical powder, foam.
Specific hazards arising during fire-fighting: –
Specific fire-fighting methods: (1) Remove the containers away from the scene of fire under safe conditions. (2) Do not use high-pressure water jet to disperse the spills. (3) Avoid inhalation of the combustion products. (4) Stay at upwind place. Keep away from low-lying lands. (5) Use water or water mist to extinguish the fire may cause frothing.
(1) Remove the containers away from the scene of fire under safe conditions. (2) Do not use high-pressure water jet to disperse the spills. (3) Avoid inhalation of the combustion products. (4) Stay at upwind place. Keep away from low-lying lands. (5) Use water or water mist to extinguish the fire may cause frothing.
Special protective equipment for firefighters: Wear full chemical protective clothing and air breathing apparatus. Sometimes a flash-resistant aluminum coat is needed.

#### 6. Accidental release measures

Personal precautions: Evacuate the contaminated area of people who do not wear the protective equipments and clothing until clearing up the spills.
Environmental precautions: (1) Removal of all ignition sources. (2) Provision of sufficient ventilation. (3) Use sand to absorb the spills. Or use wood flour to absorb the spills and collect for incineration. (4) Wash the contaminated ground with water and detergent. Collect the wastewater for disposal at a wastewater processing station.

Methods and materials for cleaning up:

- (1) For small amounts release : use paper towel to absorb the spills and put in suitable containers.
- (2) For large amounts release : use vermiculite, dry sand, clay or similar substances to absorb the spills and put in suitable containers.
- (3) Liquid release could be collected with appropriate vacuum system. Remove nearby ignition sources and provide tempering-resistant equipment when using vacuum system.

7. Handling and storage

Handling:

Keep unused and empty containers tightly closed and avoid getting impact damage.

Storage:

- (1) Store in a cool, dry and well-ventilated area. Avoid sunning.
- (2) Keep away from heat source, ignition source and incompatible substances.
- (3) Store in appropriate and labeled containers.
- (4) Store in appropriate and certified cabinet, tank, storeroom and warehouse.

8. Exposure controls/personal protection

Engineering control: local exhaust ventilation.

Control parameters:

8 hours time weighted average exposure TWA	limits/Short-term exposure STEL	limits/maximum exposure CEILING	limits biological standards: BEIs
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Personal protective equipment:

Respiratory protection:

- (1) Pressure-demand or positive-pressure full-face supplied-air respirator with an auxiliary pressure-demand or positive-pressure air breathing apparatus (self-contained breathing apparatus)
- (2) Pressure-demand or positive-pressure full-face air breathing apparatus (self-contained breathing apparatus)

Hand protection:

Impervious gloves.

**Eye protection:**

- (1) Full-face shield.
- (2) Splash-proof goggles.
- (3) Do not wear contact lenses.
- (4) Workplace should be equipped with shower and eye wash fountain.

**Skin and body protection:**

Impervious clothing.

**Hygiene measures:**

- (1) Remove contaminated clothing immediately after work. Launder clothing soaked or soiled with this material before reuse or discard. Inform individuals responsible for cleaning of potential hazards associated with handling contaminated clothing.
- (2) No smoking, eating or drinking at working place.
- (3) Wash hands thoroughly after handling this material.
- (4) Keep working place clean.

**9. Physical and chemical properties:**

Appearance (physical state, color, etc) : Clear, colorless to pale hue, oily liquid	Odor: No odor
Odor threshold: —	Melting point: —
pH value: —	Boiling point / boiling point range: 383°C (760mm/Hg)
Flammability (solid, gas): —	Flash point: 238°C (460°F)
Decomposition temperature: —	method: open cup
Auto-ignition temperature: —	Explosion limits: —
Vapor pressure: 1 mm Hg @217°C	Vapor density: 13.5 (air=1)
Density: 0.985 @20°C (water=1)	Solubility: 4.0mg @20°C
Partition coefficient (n-octanol/water, log Kow): 8.39	Evaporation rate: —

**10. Stability and reactivity**

Stability: Stable under ordinary conditions of use and storage.
Possible hazardous reactions under specific conditions: (1) Nitrates, strong oxidant : may cause fires and explosions. (2) Strong base, strong acid : incompatible substances.
Conditions to avoid : heat, spark, ignition source
Materials to avoid : Nitrates, strong oxidant, strong base, strong acid
Hazardous decomposition products: —

### 11. Toxicological information

Routes of exposure: eye, skin, respiratory tract
Symptoms: cough, sore throat, nausea
Acute toxicity: (1) May irritate eye, skin and respiratory tract. (2) The mist and vapor generated when heated may irritate and cause cough, sore throat and nausea.  LD50(rat, oral) : >5,000 mg/kg LD50(rat, dermal) : >19,670 mg/kg LC50 : —
Chronic toxicity or long-term toxicity: —

### 12. Ecological information:

Ecotoxicity: LC50(fish) : >984mg/L EC50(aquatic invertebrates ) : >0.624mg/L Bioconcentration factor (BCF) : —
Persistence and degradability: (1) The test indicates that this material is expected to biodegrade readily in lake in presence of oxygen. (2) When released into the soil, this material is expected to evaporate or permeate to underground. (3) When released into water, this material is expected to biodegrade readily. (4) When released into the air, this material is expected to be taken to distance in troposphere and scoured down by raining.  half-life time(air) : —

half-life time(water surface) : —
half-life time(groundwater) : —
half-life time(soil) : —
Bioaccumulative potential: —
Mobility in soil: —
Other adverse effects: —

### 13. Disposal considerations

<p>Methods of waste disposal:</p> <p>(1) Use incineration method.</p> <p>(2) Use specific sanitary landfill method.</p>
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### 14. Transport information

United Nations number (UN No): —
UN Proper shipping name: Bis(2-ethylhexyl) Terephthalate
<p>Transport hazard class:</p> <p>(1) Traffic Regulation, Article 84.</p> <p>(2) Regulations for the Loading of Dangerous Goods onto Vessels.</p>
Packing group: —
Marine pollutant (Yes/No): —
<p>Specific transport measures and precautionary conditions: —</p> <p>重要說明：運費說明根據運輸，數量，包裝大小，和/或原產地和目的地的模式可能會有所不同。諮詢 貴公司的有害材料/危險品專家的信息，您的具體情況。</p>

### 15. Regulatory information

<p>Applicable regulations:</p> <p>(1) Regulations for Labor Safety and Health Installations.</p> <p>(2) Regulation of Labelling and Hazard Communication of Dangerous and Harmful Materials.</p> <p>(3) Standards for Allowable Concentration of Hazardous Substances in the Air in Labor Operations Environments.</p>
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(4) Traffic Regulation.

(5) Method and Facility Standards for Industrial Waste Storage, Clearance, and Disposal.

#### 16. Other information

Literature references	(1) GHS Hazard Classification Tool, developed by Council Of Labor Affairs, Executive Yuan, Taiwan (2) LG Chemical MSDS (3) Hanwha Chemical MSDS	
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Note	In the above-mentioned information, symbol ”–“ means data not available at present, and ”/“ means this item is not applicable for this product.	

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