



# SAFETY DATA SHEET

## DIOCTYL PHTHALATE

### 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: DIOCTYL PHTHALATE

Recommended use: Chemical for industrial

Manufacturer/Supplier: **MODERN CHEMICAL CO.,LTD.**  
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### 2. HAZARDS IDENTIFICATION

#### Label elements

Pictogram



Signal word

Danger

#### Hazard statement(s)

- 1.) Causes mild skin irritation.
- 2.) Cause eye irritation.
- 3.) Suspected of causing cancer.
- 4.) May damage fertility or the unborn child.
- 5.) May cause damage to organs through prolonged or repeated exposure (Refer Section SDS 11)

#### Precautionary statement(s)

- 1.) Obtain special instructions before use.
- 2.) Do not handle until all safety precautions have been read and understood.
- 3.) Do not breathing dust/fume/gas/mist/vapours/spray.



- 4.) Wash hand thoroughly after handling.
- 5.) Use personal protective equipment as required.
- 6.) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.
- 7.) IF exposed or concerned: Get medical advice/attention.
- 8.) Get medical advice/attention if you feel unwell
- 9.) If skin irritation occurs: Get medical advice/attention.
- 10.) If eye irritation occurs: Get medical advice/attention.
- 11.) Store locked up.
- 12.) Dispose of contents/container in accordance with local/regulatory/national/international regulation.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonym:** Phthalic acid bis(2-ethylhexyl ester), 'Dioctyl' phthalate, DEHP, DOP, Bis(2-ethylhexyl)phthalase

Ingredients	% (w/w)	CAS NO.
DIOCTYL PHTHALATE	100	117-81-7

### 4. FIRST AID MEASURES

- Inhalation:** When exposed to large amounts of steam and mist, move to fresh air. Take specific treatment if needed. Get medical attention immediately. If breathing is stopped or irregular give artificial respiration and supply oxygen.
- Skin contact:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Laundering enough contaminated clothing before reuse. Get medical attention immediately. Remove contaminated clothing, shoes and isolate. Wear gloves when washing the patient, and please avoid contact with contaminated clothing.
- Eye contact:** Do not rub your eyes. Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician. Get medical attention immediately.
- Ingestion:** About whether I should induce vomiting. Take the advice of a doctor. Rinse your mouth with water immediately. Get medical attention immediately.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:**

Dry chemical, carbon dioxide, regular foam extinguishing agent, spray.



### **Unsuitable Extinguishing Media:**

Avoid use of water jet for extinguishing.

### **Specific hazards arising from Chemicals:**

No data available.

### **Special protective equipment for fire-fighters:**

Using a unattended and water devices in case of large fire and leave alone to burn if you do not imperative. Avoid inhalation of materials or combustion by-products. Do not access if the tank on fire. Use appropriate extinguishing measure suitable for surrounding fire. Wear appropriate protective equipment. Keep containers cool with water spray.

## **6. ACCIDENTAL RELEASE MEAS**

### **Precautions:**

Wear proper personal protective apparatus as indicated in Section 8 and avoid skin contact and inhalation. Do not touch spilled material. Stop leak if you can do it without risk. Remove all sources of ignition. Handling the damaged containers or spilled material after wearing protective equipment. Clean up and disposal under expert supervision is advised. Keep unauthorized people away, isolate hazard area and deny entry.

### **Environmental precautions:**

Prevent runoff and contact with waterways, drains or sewers. If large amounts have been spilled, inform the relevant authorities.

### **Methods and Material for Containment and Clean Up:**

Large spill: Stay upwind and keep out of low areas. Dike for later disposal.

Notification to central government, local government. When emissions at least of the standard amount. Dispose of waste in accordance with local regulation. Appropriate container for disposal of spilled material collected. Spilled material should be treated as a potential risk of waste collected.

## **7. HANDLING AND STORAGE**

### **Precautions for Safe Handling & Product Transfer:**

Avoid direct physical contact. Since emptied containers retain product residue (vapor, liquid, solid) follow all MSDS and label warnings even after container is emptied. Comply with all applicable laws and regulations for handling.

Dealing only with a well-ventilated place. Contaminated work clothing should not be allowed out of the workplace.

### **Conditions for Safe Storage & Unsuitable Materials:**

Save applicable laws and regulations. Do not apply any physical shock to container. Avoid direct sunlight. Please pay attention to incompatibilities materials and conditions to avoid. Prevent static electricity and keep away from



combustible materials or heat sources. By specifying a storage area for carcinogenic substances. Collected them in sealed containers.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits:** TWA 5 mg/m<sup>3</sup>

**Appropriate Engineering Controls:** A system of local and/or general exhaust is recommended to keep employee exposures above the Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The use of local exhaust ventilation is recommended to control emissions near the source.

### Individual Protection Measures

**Respiratory protection:** Under conditions of frequent use or heavy exposure. Respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

**Hand protection:** Wear appropriate glove.

**Eye protection:** Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield. Provide an emergency eye wash station and quick drench shower in the immediate work area.

**Skin and body protections:** Wear appropriate clothing.

**Hygiene measures:** No data available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form, Color and Odor :</b> liquid, Colorless	<b>Evaporation rate :</b> N/A
<b>Melting Point :</b> -56 °C	<b>Specific gravity :</b> 0.983-0.989 g/cm <sup>3</sup> at 20 °C
<b>pH :</b> N/A	<b>Solubility in water :</b> 0.005% at 20 °C
<b>Boiling point :</b> 374.15 °C at 1022 mbar	<b>Viscosity :</b> 80 cP at 20 °C
<b>Vapour pressure :</b> 0.023 mmHg at 20 °C	<b>Vapour density (air=1) :</b> 13.45
<b>Lower explosive limits :</b> N/A	<b>Upper explosive limits :</b> N/A
<b>Auto-ignition temperature :</b> 350°C	<b>Flash point:</b> 215 °C
<b>Odour threshold:</b> N/A	<b>Flammability (solid, gas):</b> N/A
<b>Decomposition temperature:</b> N/A	<b>Solubility in other solvents:</b> N/A
<b>n-octanol/water partition coefficient (log P<sub>ow</sub>):</b> 5.03	



## 10. STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	The material is stable under recommended storage and handling conditions.
<b>Reactions:</b>	No data available.
<b>Possibility of Hazardous Reactions:</b>	Hazardous Polymerization will not occur.
<b>Conditions to avoid:</b>	Avoid contact with incompatible materials and condition. Avoid: Accumulation of electrostatic charges, heating, flames and hot surfaces.
<b>Materials to avoid:</b>	No data available.
<b>Hazardous decomposition products:</b>	May emit flammable vapour if involved in fire.

## 11. TOXICOLOGICAL INFORMATION

<b>Acute toxicity:</b>	LD50 (Oral, rat): 30600 mg/kg LD50 (Dermal, rabbit): 25000 mg/kg LC50 (Inhalation, rat): >10.62 mg/l – 4h
<b>Sensitization:</b>	Skin: Cause mild skin irritation. Eyes: Causes eye irritation.
<b>Chronic toxicity:</b>	May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Carcinogenicity: IARC: Group 2B, ACGIH: A3, NTP: R
<b>Further toxicological information:</b>	No data available.

## 12. ECOLOGICAL INFORMATION

<b>Toxicity</b>	
Toxicity to fish:	LC50 – Fish, 96h: 0.3 mg/l
Toxicity to daphnia and other aquatic invertebrates:	EC50 - Daphnia pulex, 48h: 0.133 mg/l
Toxicity to algae:	No data available.
Toxicity to bacteria:	No data available.
Biodegradability Remarks:	62%, 28 day
Bioaccumulative Potential:	Bioconcentration factor: BCF 840
Mobility:	No data available.
Affected in any other way:	No data available.



### 13. DISPOSAL CONSIDERATIONS

**Material Disposal:** Since more than two kinds of designated waste is mixed, it is difficult to treat, separately, then can be reduction or stabilization by incineration or similar process. If water separation is possible, pre-process with water separation process. Dispose by incineration. The user of this product must disposal by oneself or entrust to waste disposer or person who other's waste recycle and dispose, person who establish and operate waste disposal facilities. Dispose of waste in accordance with all applicable laws and regulations.

**Container Disposal:** No data available.

### 14. TRANSPORT INFORMATION

#### ADR/ADNR

Not dangerous goods

#### IMGD

Not dangerous goods

#### IATA

Not dangerous goods

### 15. REGULATORY INFORMATION

#### A. National and/or international regulation information

- **POPs Management Law**
  - Not applicable
- **Information of EU Classification**
  - \* **Classification**
    - [1,2-Benzenedicarboxylic acid bis(2-ethylhexyl) ester] : Repr. Cat. 2: R60-61
  - \* **Risk Phrases**
    - [1,2-Benzenedicarboxylic acid bis(2-ethylhexyl) ester] : R60-61
  - \* **Safety Phrase**
    - [1,2-Benzenedicarboxylic acid bis(2-ethylhexyl) ester] : S53, S45
- **U.S Federal regulations**
  - \* **OSHA PROCESS SAFETY (29CFR1910.119)**
    - Not applicable



\* **CERCLA Section 103 (40CFR302.4)**

- [1,2-Benzenedicarboxylic acid bis(2-ethylhexyl) ester] : 45.3599 kg 100 lb

\* **EPCRA Section 302 (40CFR355.30)**

- Not applicable

\* **EPCRA Section 304 (40CFR355.40)**

- Not applicable

\* **EPCRA Section 313 (40CFR372.65)**

- [1,2-Benzenedicarboxylic acid bis(2-ethylhexyl) ester] : Applicable

○ **Rotterdam Convention listed ingredients**

- Not applicable

○ **Stockholm Convention listed ingredients**

- Not applicable

○ **Montreal Protocol listed ingredients**

- Not applicable

## 16. Other Information

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