

Material Safety Data Sheet

Section 1 Chemical and Enterprise Identification

Chemical Chinese Name: Di (2-ethylhexyl) phthalate (DOP)

Chemical Common Name or Trade Name: Dioctyl Phthalate

Chemical English name: Di- (2-ethylhexyl) phthalate

Company Name: Shandong Qilu Plasticizer Co., Ltd.

Address: Linzi District, Zibo, Shandong, China

Postcode: 255400

Fax number: (country or area code) (area code) (telephone number) 0533—7197555

Enterprise emergency telephone: (country code) (area code) (phone number) 0533—7197555

Technical specification code: lfhgjssms-2007-002

Effective Date: October 1, 2020

National emergency telephone: 86-13506437288

Section 2 Composition / information on ingredients

This chemical is pure

Molecular formula: C₂₄H₃₈O₄

Molecular weight: 390.56

CAS No.: 117-81-7

Content: ≥99%

This chemical is: Pure

Chemical Name: Dioctyl Phthalate

Section 3 Risk Overview

Dangerous category: non-dangerous goods

Routes of entry: inhalation, ingestion, eye, skin contact

Health hazard: At present, there are no reports of occupational poisoning.

Environmental hazards: the substance is polluting the environment, special attention should be paid to the pollution of water bodies

Explosion hazard: danger of burning when exposed to high heat, open flames or contact with oxidants.

Section 4 First Aid Measures

Skin contact: Remove contaminated clothing and rinse thoroughly with soap and water

Eye contact: rinse with water for at least 10 minutes and seek medical attention

Inhalation: Remove person to fresh air and give oxygen or artificial respiration if necessary

Ingestion: Rinse mouth, drink plenty of water, consult a doctor

Section 5 Fire Fighting Measures

Hazardous characteristics: Flammable, fire, high temperature, strong oxidant may cause fire hazard

Hazardous combustion products: carbon monoxide, carbon dioxide, dense smoke

Fire extinguishing methods and extinguishing agents: foam, carbon dioxide, dry powder, sand, etc.

Precautions for firefighting: firefighting water cannot flow into the sewers or rivers. When the fire breaks down, the product will decompose to produce harmful smoke.

It is harmful to health. It is recommended to wear a respirator when extinguishing fire, and at the same time use water to cool closed containers around the fire source.

Section 6 Emergency Response Measures

Emergency treatment: cut off the source of the fire and cut off the source of the leak. Quickly evacuate personnel from the leaked contaminated area to a safe area and isolate them.

Grid restricts access. It is recommended that emergency handlers wear self-contained positive-pressure respirators and antistatic clothing. Cut off as much as possible

Leak source. Prevent entry into restricted spaces such as sewers and flood drains. Small leaks: use sand, activated carbon or

Other inert materials absorb residual liquid, collect leaked liquid in closed containers as much as possible, and dispose of as waste

Provide for disposal.

Elimination method: Handle and store in strict accordance with the requirements of Parts VII and VIII of this instruction

Section 7 Handling and Storage

Handling precautions: Closed operation, providing good natural ventilation conditions. Operators must be specially trained and strictly follow

Observe operating procedures. Operators are advised to wear self-priming filter gas masks (half-mask) and chemical safety

Protective glasses and chemical resistant gloves. Away from fire and heat sources, smoking is strictly prohibited in the workplace. Use anti

Explosive ventilation systems and equipment. Prevent vapors from leaking into the workplace air. Avoid contact with oxidants

touch. Handle with care when handling to prevent damage to packaging and containers. Equipped with the corresponding variety and quantity of fire protection

Equipment and leakage emergency treatment equipment. Empty containers may be harmful residues.

Storage precautions: Store in a cool, ventilated warehouse. Hold container closed, do not empty container with pressure

The container must be resealed and placed vertically to prevent leakage. Smoking is strictly prohibited.

Strong acids should be stored separately to avoid direct sunlight. Persons are not allowed to go in and out without permission. The container must not be filled

Load other substances. Pay attention to product labels. The storage area is well ventilated, away from heat and fire sources,

Avoid direct sunlight, storage temperature: $5 \sim 35\text{ }^{\circ}\text{C}$, equipped with corresponding variety and quantity of fire equipment. Storage area

Equipment for emergency response to leaks and suitable containment materials should be available.

Section 8 Exposure controls / personal protection

Occupational exposure limits: Not available.

Engineering control: The production process is sealed and fully ventilated. Provide safety shower and eyewash equipment.

Respiratory system protection: Generally, no special protection is required. Self-priming filter-type gas masks (half-mask) can be worn when exposed to high concentrations.

Wear an air respirator for emergencies or evacuation.

Eye protection: Wear chemical safety goggles when the concentration in the air is high

Body protection: wear general work clothes

Hand protection: Wear rubber oil resistant gloves

Other protection: No smoking, eating and drinking at the work site. Avoid alcoholic beverages before work. Pay attention to personal hygiene

Raw. Perform pre-employment and regular medical examinations.

Section 9 Physical and Chemical Properties

Appearance and properties: colorless liquid with special odor

PH value: neutral

Freezing point ($^{\circ}\text{C}$): -55

Relative density (water = 1): 0.983 ($20\text{ }^{\circ}\text{C}$)

Boiling point ($^{\circ}\text{C}$): 372.5

Relative vapor density (air = 1): None

Saturated vapor pressure (kPa): 0.143kPa / $200\text{ }^{\circ}\text{C}$

Combustion heat (kcal / mol): None

Critical temperature ($^{\circ}\text{C}$): None

Critical pressure (MPa): None

Logarithm of octanol / water partition coefficient: None

Flash point ($^{\circ}\text{C}$): ≥ 190

Ignition point ($^{\circ}\text{C}$): 241

Refractive index: 1.4852

Lower explosion limit% (V / V): 0.15 ~ 0.18

Solubility: The solubility of this product in water is <0.01% and the solubility of water in this product is 0.2% at 25 ° C. Soluble in most organic solvents

Agents and hydrocarbons, slightly soluble in glycerol and ethylene glycol. Good compatibility with most industrial resins. With acetate

Vitamins; polyvinyl acetate is partially compatible.

Main use: used in plastics, rubber, paints and lubricants, emulsifiers and other industries

Other physical and chemical properties: Viscosity: 62.9mPa · S (25 ° C)

Section 10 Stability and Reactivity

Stability: Very stable at normal temperature, it will be partially decomposed when boiled for a long time, and the monoester acid will be released.

Incompatibility: strong acid, strong base, oxidant

Conditions to avoid: open flames, high heat

Hazard of polymerization: cannot happen

Decomposition products: carbon monoxide, carbon dioxide, dense smoke

Section 11 Toxicological Information

Toxicity: Oral LD 50 in mice is 34ml / kg; Oral LD 50 in rats is 30.6g / kg; Skin test (rabbit) 25g / kg; Intravenous

Injection (rat) 4260 mg / kg; intraperitoneal injection (rat) 30700 mg / kg;

Toxicity coefficient: T = 200

Chronic Toxicity: Impairs Fertility

Irritation: eyes (rabbit): 500mg; skin (rabbit): 500 mg / 24hMLD;

Sensitization: Not available

Mutagenicity: 12780 mg / kg

Teratogenicity: Not available

Carcinogenicity: TDL 0 = 216 mg / kg / 2Y-C; TD433 g / kg / 2Y-C

Section 12 Ecological Information

Ecotoxicity: Not available

Biodegradability: Not available

Non-biodegradability: Not available

Bioaccumulation or bioaccumulation: Not available

Other harmful effects: This product is not allowed to be discharged into rivers or soil

Section 13 Disposal

Nature of waste: hazardous waste

Disposal methods: disposal by controlled incineration

Disposal considerations: Empty containers can be used as waste or recycled, but containers that are not completely empty should be treated as special waste deal with

Section 14 Transport Information

IMO/IMDG NO.: NO

Dangerous Goods Number: Not available

UN number: None

Packaging method: product should be packed in iron drums

Attentions during transportation: It should be handled lightly during transportation to prevent violent impact and rain

Section 15 Regulatory Information

egulations on the Safety Management of Chemical Dangerous Goods

Classification and Marking of Commonly Used Dangerous Chemicals (GB 13690-92)

"Dangerous Goods Classification and Product Numbering" (GB 6944-86)

"Dangerous Goods Name List" (GB 12268-90)

Section 16 Other Information

References: "Solvent Handbook", "Chemical Chemical Property Data Handbook"

Time to fill out: September 28, 2007

Filling Department: Production Technology Department

Data review unit: Shandong Qilu Plasticizer Co., Ltd.

other information:

1. The product shall not be used for any purpose without consulting the supplier in advance and obtaining written operation and disposal notice provided by the supplier.

Uses other than those specified in the technical specification. Because the specific conditions of use of the product are not under the control of the supplier,

The user is responsible for ensuring compliance with relevant laws and regulations.

2. The information provided in this safety data sheet is limited to meeting safety requirements and is based on the knowledge we have.

This information is not a guarantee of product performance and characteristics. It is the user's responsibility to take all necessary measures to comply with existing laws and regulations

Duties.