

DIOCTYL PHTHALATE
88281

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name DIOCTYL PHTHALATE

Product code 88281
Product Use Description No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid,, clear

CAUTION! MAY BE HARMFUL IF INHALED. MAY CAUSE ALLERGIC SKIN REACTION.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Skin contact

Unlikely to cause skin irritation or injury. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects) Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

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Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions), Liver, male reproductive system

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways)

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, effects on male fertility, testis damage

Carcinogenicity

There is sufficient evidence for the carcinogenicity of di(2-ethylhexyl)phthalate in experimental animals. Administered in the feed, this chemical caused an increased incidence of liver cancer in male and female rats and mice. The relevance of this finding to humans is uncertain. This material is listed as a carcinogen by the National Toxicology Program (NTP).

Reproductive hazard

This material (or a component) has been shown to cause birth defects in laboratory animal studies. The relevance of these findings to humans is uncertain.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No.	Concentration
DIOCTYL PHTHALATE	117-81-7	<=100%

4. FIRST AID MEASURES

Eyes

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If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.

Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: No information available.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Foam, Dry chemical, Carbon dioxide (CO₂), Water spray

Hazardous combustion products

May form: carbon dioxide and carbon monoxide, Organic acids, Hydrocarbons

Precautions for fire-fighting

No special fire hazards are known to be associated with this product. Wear full firefighting turnout gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid.

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

Environmental precautions

No data

Methods for cleaning up

No data

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage

No data

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

DIOCTYL PHTHALATE		117-81-7
ACGIH	time weighted average	5 mg/m3
NIOSH	Recommended exposure limit (REL):	5 mg/m3
NIOSH	Short term exposure limit	10 mg/m3
OSHA Z1	Permissible exposure limit	5 mg/m3
OSHA Z1A	time weighted average	5 mg/m3

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OSHA Z1A	Short term exposure limit	10 mg/m3
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	5 mg/m3
US CA OEL	Short term exposure limit	10 mg/m3

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Eye protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin and body protection

Wear resistant gloves such as:
Neoprene
Polyethylene

Respiratory protection

Respiratory protection is not required under normal conditions of use. If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH-approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	liquid
Form	liquid
Colour	clear
Odour	slight, odourless
Boiling point/boiling range	230.00 °C @ 0.66 kPa
Melting point/range	-67 °F / -55 °C

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pH	7
Flash point	215.55 °C Open Cup
Evaporation rate	> 1 (Ethyl Ether)
Lower explosion limit/Upper explosion limit	0.3 %(V) /
Vapour pressure	1.200 mmHg @ 200.00 °F
Vapour density	16 (AIR=1)
Density	0.986 g/cm ³ @ 68.00 °F / 20.00 °C 8.21 lb/gal @ 68 °F / 20 °C
Solubility	negligible in water
Partition coefficient: n-octanol/water	No data
log Pow	7.60
Autoignition temperature	735 °F / 391 °C

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Avoid contact with:

Incompatible products

Avoid contact with:, Acids, alkalis, Strong oxidizing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide, Organic acids, Hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD 50 Rat: > 25,000 mg/kg
Acute inhalation toxicity	: LC 50 Rat: (>) 4,000 mg/m ³

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Acute dermal toxicity : LD 50 Rabbit:
25,000 mg/kg

12. ECOLOGICAL INFORMATION

Biodegradability

DIOCTYL PHTHALATE : no data available

Bioaccumulation

DIOCTYL PHTHALATE : Species: Fathead minnow (*Pimephales promelas*)
Exposure time: 56 d
Bioconcentration factor (BCF): 155 - 886
Method: Flow through

Ecotoxicity effects

Toxicity to fish

DIOCTYL PHTHALATE : no data available

Toxicity to daphnia and other aquatic invertebrates.

DIOCTYL PHTHALATE : no data available

Toxicity to algae

DIOCTYL PHTHALATE : no data available

Toxicity to bacteria

DIOCTYL PHTHALATE : no data available

Biochemical Oxygen Demand (BOD)

DIOCTYL PHTHALATE : no data available

Chemical Oxygen Demand (COD)

DIOCTYL PHTHALATE : no data available

Additional ecological information

DIOCTYL PHTHALATE : no data available

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

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14. TRANSPORT INFORMATION

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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U.S. DOT - ROAD

UN 3082	Environmentally hazardous substances, liquid, n.o.s. (DI(2-ETHYLHEXYL) PHTHALATE)	9		III	
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U.S. DOT - RAIL

UN 3082	Environmentally hazardous substances, liquid, n.o.s. (DI(2-ETHYLHEXYL) PHTHALATE)	9		III	
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U.S. DOT - INLAND WATERWAYS

UN 3082	Environmentally hazardous substances, liquid, n.o.s. (DI(2-ETHYLHEXYL) PHTHALATE)	9		III	
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TRANSPORT CANADA - ROAD

Not dangerous goods					
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TRANSPORT CANADA - RAIL

Not dangerous goods					
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TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods					
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INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods					
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INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods					
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INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods					
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MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm. DIOCTYL PHTHALATE

SARA Hazard Classification

Acute Health Hazard
Chronic Health Hazard

SARA 313 Component(s)

DIOCTYL PHTHALATE 100.00 %

Notification status

Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	y (positive listing)
China. Inventory of Existing Chemical Substances	y (positive listing)
Japan. Kashin-Hou Law List	y (positive listing)
US. Toxic Substances Control Act	y (positive listing)
EU. EINECS	y (positive listing)

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Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)
Japan. Industrial Safety & Health Law (ISHL) List	y (positive listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	y (positive listing)
Switzerland. Consolidated Inventory	y (positive listing)

Reportable quantity - Product

US. EPA CERCLA Hazardous Substances (40 CFR 302) 100 lbs

	HMIS	NFPA
Health	1*	1
Flammability	1	1
Physical hazards	0	
Instability		0
Specific Hazard	--	--

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).