

SAFETY DATA SHEET

REVISE DATE: 07/13/2015

SECTION 1: IDENTIFICATION

PRODUCT: DOP Plasticizer
SYNONYMS: dioctyl phthalate, di(2-ethylhexyl)1,2-benzenedicarboxylic acid
RECOMMENDED USE: plasticizer in manufacturing or articles made of PVC; hydraulic fluid, dielectric fluid in capacitors
SUPPLIER: Just In Time Chemical
1711 W. Elizabeth Ave
Linden, NJ 07036
GENERAL INFORMATION: 908-523-9800
EMERGENCY INFORMATION: CHEMTREC
800-424-9300

SECTION 2: HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: WARNING! Possible cancer hazard – may cause cancer based on animal data. Can cause adverse reproductive effects – such as birth defects, miscarriages or infertility.

GHS Classification:

Classification (29CFR1910.1200 Appendix A):

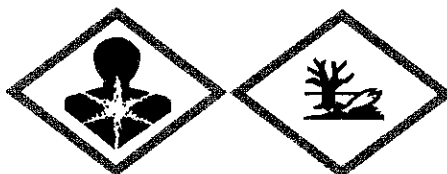
GHS Physical Hazard: Eye Irritation, Skin Irritation

GHS Health Hazard: Reproductive Toxicity

GHS Environmental Hazard: Not Listed

GHS Labeling

Symbol:



DANGER!

Signal Word: DANGER!

Hazard Statements:

- Causes mild skin irritation
- Causes eye irritation
- May damage fertility or the unborn child

Precautionary Statements:

- IF exposed or concerned: Get medical advice/attention
- Obtain special instructions before use
- Use personal protective equipment as required

HAZARD	HMIS	NFPA
Toxicity	1	0
Fire	1	1
Reactivity	0	0

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

No.	Component CAS REG.NO.	Amount %	OSHA		ACGIH	
			TWA	STEL	TWA	STEL
1	di(2-ethylhexyl) phthalate 117-81-7	100	5 Mg/m ³	10 Mg/m ³	5 Mg/m ³	10 Mg/m ³

PBT: Persistent, bioaccumulative and toxic substance

vPvB: Very persistent and very bioaccumulative substance

SECTION 4: FIRST AID MEASURES

Emergency first aid procedures by route of exposure:

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention.

Ingestion: Seek medical advice.

Skin: Wash with soap and water. Get medical attention if symptoms occur.

Eyes: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Most important symptoms and effects, both acute and delayed: Symptoms may be delayed.

Indication of any immediate medical attention and special treatment needed:

Hazards: None Listed

Treatment: Treat symptomatically

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: 216° C (420° F); Cleveland open cup

Auto-ignition Temperature: 390°C (735° F)

Lower Explosion Limit: Not Listed

Upper Explosion Limit: Not Listed

Flammability Classification: Not Listed

Suitable Extinguishing Media: Water spray, Dry Chemical Carbon Dioxide, Foam

Products of Combustion: Carbon oxides expected to the primary hazardous combustion product.

Fire Fighting Equipment/Instructions: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Protection: Wear appropriate personal protective equipment.

Special Properties: Not Listed

Environmental Precautions: Avoid release to the environment.

Method for Containment: Place absorbing material in a container for chemical waste. Large spillages: Prevent runoff from entering drains, sewers or streams. Dike for later disposal.

Methods for Clean-up: Absorb spill with vermiculite or other inert material. Large spillages: Flush spill area with water spray/

SECTION 7: HANDLING AND STORAGE

Handling: Do not taste or swallow. Wash thoroughly after handling.

Storage: Keep container closed. Keep away from food, drink and animal feed stuffs.

Specific end use: Plasticizer

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment (PPE)

General Information: Eye bath. Washing facilities.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Eye/Face Protection: It is good industrial hygiene practice to minimize eye contact.

Hand Protection: It is good industrial hygiene practice to minimize skin contact.

Body: None Listed

Other Protective Equipment: None Listed

Hygiene Measures: Observe good industrial hygiene practices.

Environmental Controls: Not Listed

Control Parameters:

Occupational exposure limits: Country specific limits have not been established or are not applicable unless listed below.

Chemical Name	Type	Exposure Limit values	Source
di-(2-ethylhexyl) phthalate DEPH	TWA	5 mg/m ³	US. ACGIH Threshold Limit Values (01 2010)
	PEL	5 mg/m ³	US. OSHA Table Z-1 for Air Contaminants (29 CFR 1910.1000) (02 2006)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid, Colorless

Odor: Slight

Odor Threshold: Not Listed

pH: Not Listed

Melting point/freezing point: -50°C

Initial boiling point and boiling range: 384°C

Flash point: 216°C (Cleveland open cup)

Evaporation rate: Not Listed

Flammability: Not Listed

Upper/lower flammability or explosive limit: Not Listed

Vapor Pressure: 0.0000001 mbar (20°C)

Vapor density (air=1): 13.5

Specific gravity: 0.985 (20°C)

Solubility (in water): 0.1 g/l

Partition coefficient: n-octanol/water: Pow: 75,858; log POW 4.88

Auto-ignition temperature: Not Listed

Decomposition temperature: >393°C (DTA) No exotherm

Dynamic viscosity: 56.6 mPa/s (25°C)

Kinematic viscosity: 57.46 mm²/s (25°C)

Explosive properties: Not Listed

Oxidizing properties: Not Listed

Minimum ignition temperature: 382°C (ASTM D2155)

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Not Listed

Chemical stability: Stable

Possibility of hazardous reactions: Not Listed
Conditions to avoid: None at ambient temperature.
Incompatible materials: Strong oxidizing agents.
Hazardous decomposition products: Carbon dioxide, Carbon monoxide

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation: Not Listed
Ingestion: Not Listed
Skin Contact: Not Listed
Eye Contact: Not Listed

Information on toxicological effects:

Acute Toxicity:

Oral:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: Oral LD-50 (Rat): >5,000 mg/kg

Dermal:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: Dermal LD-50 (Rabbit): 19,800 mg/kg

Inhalation:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: LC-50 (Rat, 4 h): > 10.62 mg/l (highest concentration tested) no deaths from exposure to nearly saturated vapor

Repeated dose toxicity:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: Not Listed

Skin corrosion/irritation:

Product: Not Listed
Specific substance(s): bis(2-ethylhexyl) phthalate: (Rabbit 24 h): slight

Serious eye damage/eye irritation:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: (Rabbit): none

Respiratory or skin sensitization:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: Skin Sensitization (Guinea Pig): none

Germ cell mutagenicity:

In vitro:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: Not Listed

In vivo:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: Not Listed

Carcinogenicity:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: IARC 2b: possibly carcinogenic to humans. NTP reasonably anticipated to be a carcinogen.

Reproductive toxicity:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: May damage fertility or the unborn child.

Specific target organ toxicity – single exposure:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: Not Listed

Specific target organ toxicity – repeated exposure:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: Not Listed

Aspiration hazard:

Product: Not Listed
Specific substance(s): di(2-ethylhexyl) phthalate: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: Not Listed

Other adverse effects: DEPH, di-(2-ethylhexyl) phthalate, was administered to rats and mice in a lifetime bioassay sponsored by the U.S. National Toxicology Program (NTP). High feed concentrations (mice: 3000 and 6000 ppm; rats: 6000 and 12,000 ppm) were used because of the very low toxicity of di-(2-ethylhexyl) phthalate. Liver tumors were produced at both dose levels in each species. However, high doses to humans handling this material are not expected since oral consumption is not a likely route of significant exposure. Oral doses of this material that were high enough to cause toxicity in pregnant animals also produced some minor abnormalities in their offspring. High oral doses of this

material given to male animals produced reduced fertility. Contains an IARC (International Agency for Research on Cancer) 2B material. IARC 2B is a classification for possible human carcinogen based on sufficient evidence on carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Acute Toxicity:

Fish:

Product: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: LC-50 (Fathead Minnow, 96 h): > 0.67 mg/l (limit of solubility in fresh water); NOEC: (Fathead Minnow, 96 h): > 0.67 mg/l (limit of solubility in fresh water); LC-50 (Sheepshead Minnow, 96 h): > 0.17 mg/l (limit of solubility in fresh water)

Aquatic invertebrates:

Product: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: LC-50 (Water Flea, 96 h): > 0.16 mg/l (limit of solubility in fresh water); NOEC: (Water Flea, 96 h): > 0.16 mg/l (limit of solubility in fresh water)

Chronic Toxicity:

Fish:

Product: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: Not Listed

Aquatic Invertebrates:

Product: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: Not Listed

Toxicity to Aquatic Plants:

Product: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: EC-50 (*Selenastrum capricornutu*, 96 h): > 10 mg/l

Persistence and Degradability:

Biodegradation:

Product: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: Not Listed

Biological Oxygen Demand:

Product: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: Not Listed

Chemical Oxygen Demand:

Product: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: Not Listed

BOD/COD Ratio:

Product: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: Not Listed

Bioaccumulative Potential:

Product: Not Listed

Specified substance(s): di(2-ethylhexyl) phthalate: Not Listed

Mobility in soil:

Product: Not Listed

Known or predicted distribution to environmental compartments: di(2-ethylhexyl) phthalate: Not Listed

Results of PBT and vPvB Assessment: di(2-ethylhexyl) phthalate: Not Listed

Other adverse effects: Not Listed

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

General information: Not Listed

Disposal Methods: Dispose of waste and residues in accordance with local authority requirement methods. Incinerate. Since emptied retain product residue, follow label warnings even after container is emptied.

SECTION 14: TRANSPORTATION INFORMATION

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT: Class 9, Packing Group III when material is shipped in quantities in one package at or above the Reportable Quantity and when no other hazard class applies; otherwise, not regulated.

Reportable Quantity: 45.4 kg (di(2-ethylhexyl) phthalate)

Possible Shipping Description(s): Not Regulated

IATA: Class Not Regulated

Possible Shipping Description(s): Not Regulated

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Status: Controlled

WHMIS (Canada) Hazard Classification: D/2/A

SARA 311-312 Hazard Classification(s): immediate (acute) health hazard, delayed (chronic) health hazard

US EPCRA (SARA Title III) Section 313 – Toxic Chemical List: di(2-ethylhexyl) phthalate

OSHA: hazardous

TSCA (US Toxic Substance Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substance List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

AICS/NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

Inventory of Existing Chemical Substances in China: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

SECTION 16: OTHER INFORMATION

HMIS® Hazard Ratings: Health – 1*, Flammability – 1, Chemical Reactivity – 0

HMIS® ratings involve data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered.

Revision information: Not Listed

Key literature reference and sources for data: Not Listed

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The Environmental Information included under Section 12 hereof as well as the Hazardous Materials Identification System (HMIS) and National Fire Protection Association (NFPA) ratings have been included by Just In Time Chemical, in order to provide additional health and hazard classification information. The ratings recommended are based upon the criteria supplied by the developers of these rating systems, together with Just In Time Chemical's interpretation of the available data.

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