

SAFETY DATA SHEET

Pump Fluid
DIOCTYL PHTHALATE

Preparation Date: 01/Nov/2017

Version: 1

1. IDENTIFICATION

Product identifier

Product Name Pump Fluid (DIOCTYL PHTHALATE)

Other means of identification

Product Code(s) 60.001.09, 60.001.10, 60.001.11, 60.001.12

Synonyms none

Recommended use of the chemical and restrictions on use

Recommended Use Plasticizer

Restricted Uses No information available

Supplier Identifier

Pinnacle West Enterprises Inc.
31879 Mercantile Way
Abbotsford, BC V2T 4C3
Telephone: 604-854-5968

Emergency telephone number

24 Hour Emergency Phone Number (CANUTEC): 1-888-226-8832 (1-888-CAN-UTEC)

2. HAZARD IDENTIFICATION

Hazardous Classification of the substance or mixture

Carcinogenicity	Category 1B
Reproductive toxicity	Category 1B

Label elements

Hazard pictograms



Signal Word: Danger

Hazard statements

May cause cancer
May damage fertility or the unborn child

Precautionary Statements

Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection

Response

IF exposed or concerned: Get medical advice/attention

Storage

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

Unknown acute toxicity No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No	Weight-%	Synonyms
Di(2-ethylhexyl) phthalate	117-81-7	90 - 100%	Di(2-ethylhexyl) phthalate

4. FIRST AID

Description of first aid measures

General advice

IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact

Wash skin with soap and water.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed:

Harmful if swallowed May cause Central Nervous System effects. Causes mild skin irritation May cause irritation of the respiratory tract. Causes irritation of the mouth, nose and throat. Causes mild eye irritation. May result in irritation of the mouth and gastrointestinal tract.

Indication of any immediate medical attention and special treatment needed:**Note to physicians**

Treatment based on sound judgment of physician and individual reactions of patient.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the substance or mixture

None expected.

Hazardous combustion products

Carbon monoxide. Carbon dioxide.

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Environmental precautions

See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing mist or vapor.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical Name	Alberta OEL	British Columbia OEL	Ontario	Quebec OEL	Exposure Limit - ACGIH	Immediately Dangerous to Life or Health - IDLH
Di(2-ethylhexyl) phthalate 117-81-7	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 3 mg/m ³ STEL: 5 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³	5 mg/m ³ TLV-TWA	5000 mg/m ³

Consult local authorities for recommended exposure limits

Appropriate engineering controls

Engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical goggles; also wear a face shield if splashing hazard exists.

Hand protection

Appropriate chemical resistant gloves should be worn.

Skin and body protection

Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Respiratory protection

If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator. In case of spill or leak resulting in unknown concentration, use a NIOSH approved supplied air respirator.

General hygiene considerations

Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Colorless
Odor	Slight
Odor threshold	No information available

PROPERTIES

pH	No data available
Melting point / freezing point	-50 °C / -58 °F
Initial boiling point/boiling range	384 °C / 725 °F

Remarks • Method

None known

None known

Flash point	216 °C / 421 °F	Cleveland Open Cup
Evaporation rate	Negligible	
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	None known
Relative vapor density	13.5	
Specific Gravity	0.985	
Water solubility	0.1 g/l	
Solubility in other solvents	No data available	
Partition coefficient	No data available	None known
Autoignition temperature	382 °C / 720 °F	
Decomposition temperature	No data available	None known
Kinematic viscosity	56.6 mPa.s (25 C)	
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidizing properties	No information available.	
Molecular weight	390.56	
VOC Percentage Volatility	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. STABILITY AND REACTIVITY

Reactivity/Chemical Stability

Stable under normal conditions

Possibility of hazardous reactions

No additional remark.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

May cause irritation of the respiratory tract. Causes irritation of the mouth, nose and throat.

Eye contact

Causes mild eye irritation.

Skin contact

Causes mild skin irritation.

Ingestion

Harmful if swallowed. May cause Central Nervous System effects. May result in irritation of the mouth and gastrointestinal tract.

Information on toxicological effects

Symptoms

No information available.

Numerical measures of toxicity

Acute toxicity

Unknown acute toxicity

No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Di(2-ethylhexyl) phthalate 117-81-7	= 30 g/kg (Rat) > 15000 mg/kg (Rat) > 2000 mg/kg (Rat)	= 25 g/kg (Rabbit) > 6000 mg/kg (Rat)	= 10600 mg/m ³ (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

Causes mild skin irritation.

Serious eye damage/eye irritation

Causes mild eye irritation.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

DEHP 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 DEHP. Liver tumors were produced at both dose levels in each species. Further studies have shown that the liver tumors probably arose from the ability of DEHP at high doses in rodents to perturb lipid metabolism, to proliferate peroxisomes, or to increase the rate of cell division. Since non-rodent species (including primates) have been shown to be very resistant to these effects, and since DEHP is not genotoxic, DEHP probably presents a negligible carcinogenic risk to humans at exposure levels typical of occupational or consumer use. 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. However, high doses to humans handling this material are not expected since oral consumption is not a likely route of significant exposure. Because this material does not evaporate readily and is not easily absorbed through human skin, it is not expected to produce such effects in humans through inhalation or skin exposure when handled in a manner consistent with the precautionary measures contained in this material safety data sheet.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Di(2-ethylhexyl) phthalate 117-81-7	A3	Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity

Classification based on data available for ingredients.

Specific target organ systemic toxicity - single exposure

No information available.

Specific target organ systemic toxicity - repeated exposure

No information available.

Aspiration hazard

No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Fish Species Data	Toxicity to microorganisms	Crustacea
Di(2-ethylhexyl) phthalate 117-81-7	0.1 mg/L EC50 Pseudokirchneriella subcapitata 96 h 0.1 mg/L EC50 Pseudokirchneriella subcapitata 96 h static 130 mg/L EC50 Desmodesmus subspicatus 72 h 500 mg/L EC50 Desmodesmus subspicatus 72 h	0.27 - 0.67 mg/L LC50 (Pimephales promelas) 96 h flow-through 0.16 mg/L LC50 (Pimephales promelas) 96 h static 0.18 mg/L LC50 (Lepomis macrochirus) 96 h static 0.200 mg/L LC50 (Lepomis macrochirus) 96 h flow-through 0.200 mg/L LC50 (Lepomis macrochirus) 96 h static 0.23 mg/L LC50 (Pimephales promelas) 96 h static 0.32 mg/L LC50 (Brachydanio rerio) 96 h semi-static 0.32 mg/L LC50 (Oncorhynchus mykiss) 96 h flow-through 0.32 mg/L LC50 (Oryzias latipes) 96 h semi-static 0.32 mg/L LC50 (Poecilia reticulata) 96 h semi-static 0.67 mg/L LC50 (Oryzias latipes) 96 h flow-through 100 mg/L LC50 (Oncorhynchus mykiss) 96 h static	Not available	LC50: =9.4mg/L (48h, Daphnia magna) EC50: >0.16mg/L (48h, Daphnia magna) EC50: >1mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation No information available.

Component Information

Chemical Name	Partition coefficient
Di(2-ethylhexyl) phthalate 117-81-7	5.03

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Do not reuse empty containers.

14. TRANSPORT INFORMATION

TDG (Canada):

UN Number	Not applicable
Shipping name	Not regulated
Class	Not applicable
Packing Group	Not applicable
Marine pollutant	Not available.

DOT (U.S.)

UN Number	UN3082
Shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(BIS(2-ETHYLHEXYL)PHTHALATE)
Class	9
Packing Group	III
Marine pollutant	Not available

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture**U.S. Regulatory Rules**

Chemical Name	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Di(2-ethylhexyl) phthalate - 117-81-7	Not Listed	Listed	Listed

International Inventories

TSCA	Complies
DSL/NDSL	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA:	Health hazards 0	Flammability 1	Instability 0	Physical and chemical properties - Personal protection X
HMIS Health Rating:	Health hazards * 2	Flammability 1	Physical hazards 0	

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Prepared By: The Environment, Health and Safety Department of Univar Canada Ltd.

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End of Safety Data Sheet