



Comet Chemical Company Ltd.  
3463 Thomas Street  
Innisfill, ON, Canada, L9S 3W4  
Telephone: (705) 436 5580

Dioctyl Phthalate

SDS Preparation Date (mm/dd/yyyy): 10/12/2016

Page 1 of 10

## SAFETY DATA SHEET

### SECTION 1. IDENTIFICATION

**Product identifier used on the label**

: **Dioctyl Phthalate**

**Product Code(s)** : None reported.

**Recommended use of the chemical and restrictions on use**

: Plasticiser; Solvent ; Intermediate  
Use pattern : professional use  
Restriction on use: None known

**Chemical family** : Pure substance

**Name, address, and telephone number of the supplier:**

**Comet Chemical Company Ltd.**

3463 Thomas Street  
Innisfill, ON, Canada  
L9S 3W4

Supplier's Telephone # : 705-436-5580

**24 Hr. Emergency Tel #** : TERRRAPURE ENVIRONMENTAL : 800-567-7455

**Name, address, and telephone number of the manufacturer:**

Refer to supplier

### SECTION 2. HAZARDS IDENTIFICATION

**Classification of the chemical**

Clear liquid. Slight odour.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification:

Carcinogenicity- Category 2

Reproductive Toxicity-Category 1

**Label elements**

*Hazard pictogram(s)*



*Signal Word*

**DANGER!**

*Hazard statement(s)*

May damage fertility or the unborn child.  
Suspected of causing cancer.

Dioctyl Phthalate

SDS Preparation Date (mm/dd/yyyy): 10/12/2016

Page 2 of 10

## SAFETY DATA SHEET

### Precautionary statement(s)

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

IF exposed or concerned: Get medical attention/advice.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Other hazards

Other hazards which do not result in classification:

Ingestion may cause irritation of the mouth, throat and stomach. May cause mild skin irritation. May cause mild eye irritation.

Environmental precautions:

Avoid release to the environment. See ECOLOGICAL INFORMATION, Section 12.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration (% by weight)</u>
Di(2-ethylhexyl) phthalate	Bis(2-ethylhexyl)phthalate DEHP DOP	117-81-7	100.00

### SECTION 4. FIRST-AID MEASURES

#### Description of first aid measures

- Ingestion* : Do not induce vomiting. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical attention if symptoms persist.
- Inhalation* : If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Call a POISON CENTER or doctor/physician if you feel unwell.
- Skin contact* : Wash affected areas with soap and water. Take off contaminated clothing and wash before re-use. Get medical attention if irritation develops and persists.
- Eye contact* : Flush with large amounts of water for 15 minutes. Remove contact lenses, if present and easy to do. If irritation or symptoms develop, seek medical attention.

#### Most important symptoms and effects, both acute and delayed

- : May damage fertility or the unborn child. Suspected of causing cancer. Direct skin contact may cause temporary redness. Direct eye contact may cause temporary redness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

#### Indication of any immediate medical attention and special treatment needed

- : Treat symptomatically.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing media

##### Suitable extinguishing media

- : Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.

##### Unsuitable extinguishing media

- : Do not use a solid water stream as it may scatter and spread fire.

Dioctyl Phthalate

SDS Preparation Date (mm/dd/yyyy): 10/12/2016

Page 3 of 10

## SAFETY DATA SHEET

### Special hazards arising from the substance or mixture / Conditions of flammability

- : Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

### Flammability classification (OSHA 29 CFR 1910.106)

- : Not flammable.

### Hazardous combustion products

- : Carbon dioxide and carbon monoxide.

### Special protective equipment and precautions for firefighters

#### *Protective equipment for fire-fighters*

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. A full-body chemical resistant suit should be worn.

#### *Special fire-fighting procedures*

- : Evacuate personnel to safe areas. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. Dike for water control. Avoid release to the environment.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

- : All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

**Environmental precautions** : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. For large spills, dike the area to prevent spreading.

### Methods and material for containment and cleaning up

- : Remove all sources of ignition. Ventilate the area. Prevent further leakage or spillage if safe to do so. Absorb material with inert absorbent, and place into labelled containers for disposal. Contact the proper local authorities.

### Special spill response procedures

- : In case of transportation accident, contact TERRAPURE ENVIRONMENTAL at 1-800-567-7455.  
US CERCLA Reportable quantity (RQ): (100 lbs / 45.4 kg)

## SECTION 7. HANDLING AND STORAGE

### Precautions for safe handling

- : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/clothing and eye/face protection. Use only outdoors or in a well-ventilated area. Do not breathe mist or vapor. Avoid contact with skin, eyes and clothing. Keep away from heat and flame. Keep away from oxidizing agents. Keep away from incompatibles. Label containers appropriately. Wash thoroughly after handling. Keep containers closed when not in use.

**Conditions for safe storage** : Store locked up. Store in a cool, dry, well-ventilated area. Store away from incompatibles and out of direct sunlight. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.

**Incompatible materials** : Strong oxidizers (e.g. Chlorine, Peroxides, etc.).

Dioctyl Phthalate

SDS Preparation Date (mm/dd/yyyy): 10/12/2016

Page 4 of 10

## SAFETY DATA SHEET

### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Exposure Limits:</b>				
<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Di(2-ethylhexyl) phthalate	5 mg/m <sup>3</sup>	N/Av	5 mg/m <sup>3</sup>	10mg/m <sup>3</sup>

#### Exposure controls

##### Ventilation and engineering measures

: Provide exhaust ventilation or other engineering controls to keep the airborne concentration of vapours below their respective threshold limit value.

##### Respiratory protection

: Respiratory protection is required if the concentrations exceed the TLV. Use a NIOSH approved dust respirator if dust levels exceed exposure limits. Seek advice from respiratory protection specialists.

##### Skin protection

: Wear protective gloves/clothing. Advice should be sought from glove suppliers.

##### Eye / face protection

: Wear eye/face protection. Safety glasses with side-shields or chemical splash goggles.

##### Other protective equipment

: Wear appropriate protective clothing to prevent skin contact, such as coveralls or long sleeved shirt, long pants, and shoes and socks. Wear protective gloves. An eyewash station and safety shower should be made available in the immediate working area. Other equipment may be required depending on workplace standards. Avoid

##### General hygiene considerations

: Avoid breathing mist or vapours. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke or use cosmetics while working with this product. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Remove soiled clothing and wash it thoroughly before reuse.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	: Clear colourless liquid.
<b>Odour</b>	: Slight odour.
<b>Odour threshold</b>	: No information available.
<b>pH</b>	: No information available.
<b>Melting/Freezing point</b>	: -55°C
<b>Initial boiling point and boiling range</b>	: 2314°C
<b>Flash point</b>	: 215°C
<b>Flashpoint (Method)</b>	: closed cup
<b>Evaporation rate (BuAe = 1)</b>	: No information available.
<b>Flammability (solid, gas)</b>	: Not applicable.
<b>Lower flammable limit (% by vol.)</b>	: N/Av
<b>Upper flammable limit (% by vol.)</b>	: N/Av
<b>Oxidizing properties</b>	: None known.
<b>Explosive properties</b>	: Not explosive
<b>Vapour pressure</b>	: 1.2 mmHg
<b>Vapour density</b>	: (Air = 1) 16

Dioctyl Phthalate

SDS Preparation Date (mm/dd/yyyy): 10/12/2016

Page 5 of 10

## SAFETY DATA SHEET

### Relative density / Specific gravity

: 0.985 g/cm<sup>3</sup>

### Solubility in water

: Insoluble. (0.1 g/L)

### Other solubility(ies)

: Soluble in non-polar solvents such as n-hexane and other hydrocarbon solvents.

### Partition coefficient: n-octanol/water or Coefficient of water/oil distribution

: 7.94

### Auto-ignition temperature

: 390°C

### Decomposition temperature

: >393°C (739.4°F)

### Viscosity

: 56.6 mPa.s (25°C)  
57.46 mm<sup>2</sup>/s (25°C)

### Volatiles (% by weight)

: No information available.

### Volatile organic Compounds (VOC's)

: No information available.

### Absolute pressure of container

: N/Ap

### Flame projection length

: N/Ap

### Other physical/chemical comments

: None known or reported by the manufacturer.

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

: Not normally reactive.

### Chemical stability

: Stable under normal conditions.

### Possibility of hazardous reactions

: Hazardous polymerization does not occur.

### Conditions to avoid

: Ensure adequate ventilation, especially in confined areas. Avoid contact with incompatible materials.

### Incompatible materials

: See Section 7 (Handling and Storage) for further details.

### Hazardous decomposition products

: None known, refer to hazardous combustion products in Section 5.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure:

Routes of entry inhalation : YES

Routes of entry skin & eye : YES

Routes of entry Ingestion : YES

### Routes of exposure skin absorption

: NO

### Potential Health Effects:

#### Signs and symptoms of short-term (acute) exposure

##### *Sign and symptoms Inhalation*

: Inhalation of high concentrations of vapors, may cause respiratory irritation, with throat discomfort, coughing or difficulty breathing.

##### *Sign and symptoms ingestion*

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

##### *Sign and symptoms skin*

: May cause mild skin irritation on prolonged contact.

##### *Sign and symptoms eyes*

: Direct eye contact may cause slight redness.

Diocetyl Phthalate

SDS Preparation Date (mm/dd/yyyy): 10/12/2016

Page 6 of 10

## SAFETY DATA SHEET

### Potential Chronic Health Effects

: Prolonged exposure can cause redness, swelling, itching, cracking of the skin, dermatitis and sensitization.

### Mutagenicity

: Not expected to be mutagenic in humans.

### Carcinogenicity

: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Carcinogenicity- Category 2 Suspected of causing cancer.

### Reproductive effects & Teratogenicity

: This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Reproductive Toxicity-Category 1 May damage fertility or the unborn child.

### Sensitization to material

: Not expected to be a skin or respiratory sensitizer.

### Specific target organ effects

: This material is not classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

### Medical conditions aggravated by overexposure

: None known or reported by the manufacturer.

### Synergistic materials

: No information available.

### Toxicological data

: See below for toxicological data on the substance.

<u>Chemical name</u>	<u>LC<sub>50</sub>(4hr)</u>	<u>LD<sub>50</sub></u>	
	<u>inh, rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Di(2-ethylhexyl) phthalate	>10.62 mg/L 4 h	>5000 mg/kg	24500mg/kg

### Other important toxicological hazards

: See Section 3 for additional information.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

: Harmful to aquatic life.

The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

See the following tables for individual ingredient ecotoxicity data.

### Ecotoxicity data:

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Fish</u>		
		<u>LC50 / 96h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Di(2-ethylhexyl) phthalate	117-81-7	0.16mg/L (Fathead minnow) (no deaths)	N/Av	None.

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Daphnia</u>		
		<u>EC50 / 48h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Di(2-ethylhexyl) phthalate	117-81-7	0.16 mg/L (Daphnia magna) (no deaths)	N/Av	None.



Comet Chemical Company Ltd.  
3463 Thomas Street  
Innisfill, ON, Canada, L9S 3W4  
Telephone: (705) 436 5580

Dioctyl Phthalate

SDS Preparation Date (mm/dd/yyyy): 10/12/2016

Page 7 of 10

## SAFETY DATA SHEET

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Algae</u>		
		<u>EC50 / 96h or 72h</u>	<u>NOEC / 96h or 72h</u>	<u>M Factor</u>
Di(2-ethylhexyl) phthalate	117-81-7	N/Av	N/Av	None.

**Persistence and degradability**

: Expected to be readily biodegradable.

**Bioaccumulation potential**

: No information available.

<u>Components</u>	<u>Partition coefficient n-octanol/water (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Di(2-ethylhexyl) phthalate (CAS 117-81-7)	7.94	N/Av

**Mobility in soil** : No information available.

**Other Adverse Environmental effects**

: No data is available on the product itself.

### SECTION 13. DISPOSAL CONSIDERATIONS

**Handling for Disposal**

: Handle waste according to recommendations in Section 7. Empty containers may contain hazardous residues.

**Methods of Disposal**

: Dispose in accordance with all applicable federal, state, provincial and local regulations.

**RCRA**

: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method.





Diocetyl Phthalate

SDS Preparation Date (mm/dd/yyyy): 10/12/2016

Page 8 of 10

## SAFETY DATA SHEET

### SECTION 14. TRANSPORTATION INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
TDG	None.	Not regulated.	not regulated	none	
TDG Additional information	None.				
49CFR/DOT	None.	Not regulated.	not regulated	none	
49CFR/DOT Additional information	Not regulated unless shipped in quantities in one package that equal or exceed the reportable quantity = (100 lbs / 45.4 kg)				
IMDG	None.	Not regulated.	not regulated	none	
IMDG Additional information	None.				
ICAO/IATA	None.	Not regulated.	not regulated	none	
ICAO/IATA Additional information	None.				

**Special precautions for user** : Appropriate advice on safety must accompany the package.

**Environmental hazards** : This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See Section 12 for more environmental information.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

: This information is not available.

### SECTION 15 - REGULATORY INFORMATION

#### US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

<u>Ingredients</u>	CAS #	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical	de minimus Concentration
Di(2-ethylhexyl) phthalate	117-81-7	Yes	100 lb/ 45.4 kg	N/Av	Toxic Chemical Yes	0.1%

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Chronic Health Hazard Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.



Dioctyl Phthalate

SDS Preparation Date (mm/dd/yyyy): 10/12/2016

Page 9 of 10

## SAFETY DATA SHEET

### US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

<u>Ingredients</u>	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Di(2-ethylhexyl) phthalate	117-81-7	Yes	Carcinogen; Developmental Toxicity; male reproductive toxicity	Yes	Yes	Yes	Yes	Yes	Yes

### Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

### International Information:

Components listed below are present on the following International Inventory list:

<u>Ingredients</u>	CAS #	European EINECS	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	New Zealand IOC
Di(2-ethylhexyl) phthalate	117-81-7	204-211-0	Present	Present	(3)-1307	KE-02196	Present	HSR002982

## SECTION 16. OTHER INFORMATION

### Legend

: ACGIH: American Conference of Governmental Industrial Hygienists  
CAS: Chemical Abstract Services  
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980  
CFR: Code of Federal Regulations  
CNS: Central Nervous System  
DOT: Department of Transportation  
EPA: Environmental Protection Agency  
EINECS: European Inventory of Existing Commercial chemical Substances  
IARC: International Agency for Research on Cancer  
IBC: Intermediate Bulk Container  
IMDG: International Maritime Dangerous Goods  
Inh: Inhalation  
LC: Lethal Concentration  
LD: Lethal Dose  
N/Ap: Not Applicable  
N/Av: Not Available  
NIOSH: National Institute of Occupational Safety and Health  
NTP: National Toxicology Program  
OSHA: Occupational Safety and Health Administration  
PEL: Permissible exposure limit  
RCRA: Resource Conservation and Recovery Act  
RTECS: Registry of Toxic Effects of Chemical Substances  
SARA: Superfund Amendments and Reauthorization Act

Dioctyl Phthalate

SDS Preparation Date (mm/dd/yyyy): 10/12/2016

Page 10 of 10

## SAFETY DATA SHEET

STEL: Short Term Exposure Limit  
TDG: Canadian Transportation of Dangerous Goods Act & Regulations  
TLV: Threshold Limit Values  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Identification System

### References

- : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2016
- 2. International Agency for Research on Cancer Monographs, searched 2016
- 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2016(Chempendium, HSDB and RTECs).
- 4. Material Safety Data Sheets from manufacturer.
- 5. US EPA Title III List of Lists - 2016 version.
- 6. California Proposition 65 List - 2016 version.
- 7. OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2016.

Preparation Date (mm/dd/yyyy)

: 10/12/2016

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

<p><b>Prepared for:</b> Comet Chemical Company Ltd. 3463 Thomas Street Innisfill, ON L9S 3W4 Information (M-F 8:00-5:00): 705-436-5580 www.cometchemical.com</p>	 <p><b>COMET</b> COMET CHEMICAL COMPANY LTD.</p>
<p><b>Prepared by:</b> ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada) <a href="http://www.thecompliancecenter.com">http://www.thecompliancecenter.com</a></p>	 <p><b>icc</b> ComplianceCenter</p>

### DISCLAIMER

This Safety Data Sheet was prepared by ICC The Compliance Center Inc. using information provided by Comet Chemical Company Ltd. and CCOHS' Web Information Service. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Comet Chemical Company Ltd. expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

This Safety Data Sheet may not be changed, or altered in any way without the expressed knowledge and permission of ICC The Compliance Center Inc. and Comet Chemical Company Ltd.

END OF DOCUMENT