

Dibutyl Phthlate

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## SAFETY DATA SHEET

### SECTION 1. IDENTIFICATION

**Product identifier used on the label**

: **Dibutyl Phthlate**

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

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

: Plasticiser;Solvent;Chemical 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 colourless liquid. Odorless.

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:

Reproductive Toxicity-Category 1

**Label elements**

*Hazard pictogram(s)*



*Signal Word*

DANGER!

*Hazard statement(s)*

May damage fertility or the unborn child.

*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 advice/attention.  
Store locked up.  
Dispose of contents/container in accordance with local regulation.

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### Other hazards

Other hazards which do not result in classification: May cause mild skin and eye irritation. Ingestion can cause gastrointestinal irritation, nausea, and diarrhea.

### 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>
Dibutyl phthalate	DBP n-butyl phthlate	84-74-2	100.00

### SECTION 4. FIRST-AID MEASURES

#### Description of first aid measures

- Ingestion* : Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention.
- Inhalation* : Move to fresh air. If breathing is difficult, give oxygen. If breathing stops, provide artificial respiration. Get medical attention if symptoms persist.
- Skin contact* : Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.
- Eye contact* : Flush with large amounts of water for 15 minutes. Get medical attention if irritation persists after washing.

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

- : May damage fertility or the unborn child. May be mildly irritating to eyes and skin. Symptoms may include stinging and tearing. Symptoms may include redness, edema, drying defatting and cracking of the skin. May cause respiratory irritation. Symptoms may include upper respiratory irritation, coughing and breathing difficulties. 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* : Water spray. Water fog Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).
- Unsuitable extinguishing media* : Do not use water jet as extinguisher, as this will spread the fire.

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

- : Not considered flammable. 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 oxides. Other irritating fumes and smoke.

#### Special protective equipment and precautions for firefighters

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

- : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

##### *Special fire-fighting procedures*

- : Evacuate the area promptly. Remove all sources of ignition. Containers should be cooled with water to prevent vapor pressure build up. Move containers from fire area if you can do so without risk. Prevent fire extinguishing water from contaminating surface water or the ground water system. Dike for water control.



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### SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

- : Keep unnecessary personnel away. Remove all sources of ignition. Keep out of low areas. Ventilate closed spaces before entering them. Wear appropriate protective equipment and clothing during clean-up. See Section 8 of the SDS for Personal Protective Equipment.

**Environmental precautions** : Avoid discharge into drains, water courses or onto the ground.

**Methods and material for containment and cleaning up**

- : Ventilate the area. Stop leak if you can do so without risk. Prevent entry into waterways, sewer, basements or confined areas. Dike for later disposal. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Keep in properly labelled containers. For waste disposal, see Section 13 of the SDS.

**Special spill response procedures**

- : In case of transportation accident, contact TERRAPURE ENVIRONMENTAL at 1-800-567-7455.  
 US CERCLA Reportable quantity (RQ): Dibutyl phthalate (10 lbs / 4.54 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. Protect material from direct sunlight. Wear protective gloves/clothing and eye/face protection. Use in a well-ventilated area. Avoid breathing mist or vapours. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

**Conditions for safe storage** : Store locked up. Keep away from heat, sparks and open flame. Store in tightly close original container in a well-ventilated place. Store in original tightly closed container.

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

### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Exposure Limits:</u>					
	<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
		<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Dibutyl phthalate	5 mg/m <sup>3</sup>	N/Av	5 mg/m <sup>3</sup>	N/Av	

**Exposure controls**

**Ventilation and engineering measures**

- : 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.

**Respiratory protection** : Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Advice should be sought from respiratory protection specialists.

**Skin protection** : Wear protective gloves. Advice should be sought from glove suppliers.

**Eye / face protection** : Wear safety goggles or glasses as appropriate for the job.

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**Other protective equipment** : Wear suitable protective clothing.

**General hygiene considerations**

: When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** : Clear colourless liquid.

**Odour** : Odorless.

**Odour threshold** : No data available.

**pH** : No data available.

**Melting/Freezing point** : Not available.

**Initial boiling point and boiling range**

: 340°C (644°F)

**Flash point** : 157°C (314.6°F)

**Flashpoint (Method)** : Not available.

**Evaporation rate (BuAe = 1)** : No data available.

**Flammability (solid, gas)** : Not applicable.

**Lower flammable limit (% by vol.)**

: Not available.

**Upper flammable limit (% by vol.)**

: Not available.

**Oxidizing properties** : None known.

**Explosive properties** : Not explosive

**Vapour pressure** : Not available.

**Vapour density** : Not available.

**Relative density / Specific gravity**

: 1.047

**Solubility in water** : Insoluble.

**Other solubility(ies)** : No data available.

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

: 2.8

**Auto-ignition temperature** : 402°C (755.6°F)

**Decomposition temperature** : No data available.

**Viscosity** : 21 mPas

**Volatiles (% by weight)** : No data available.

**Volatile organic Compounds (VOC's)**

: No data available.

**Absolute pressure of container**

: No data available.

**Flame projection length** : No data available.

**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**

: No dangerous reaction known under conditions of normal use.

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- Conditions to avoid** : Avoid temperatures exceeding the flash point. Avoid contact with incompatible materials. Do not use in areas without adequate ventilation.
- Incompatible materials** : Strong oxidizers (e.g. Chlorine, Peroxides, etc.).
- 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** : YES

**Potential Health Effects:**

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

*Sign and symptoms Inhalation*

- : Inhalation of vapours may cause mild irritation to the mucous membrane.

*Sign and symptoms ingestion*

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

*Sign and symptoms skin*

- : Direct skin contact may cause slight or mild, transient irritation.

*Sign and symptoms eyes*

- : Direct eye contact may cause slight or mild, transient irritation.

**Potential Chronic Health Effects**

- : Prolonged or repeated exposure may cause blood system effects. Prolonged or repeated overexposure may cause liver effects.

**Mutagenicity**

- : Not expected to be mutagenic.

**Carcinogenicity**

- : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

**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**

- : Not 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>
Dibutyl phthalate	>15.68 mg/L	6300 mg/kg	4200 mg/kg

**Other important toxicological hazards**

- : No additional information.

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### SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity** : Do not allow material to contaminate ground water system. See data for individual ingredient ecotoxicity data.

**Ecotoxicity data:**

<u>Ingredients</u>	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Dibutyl phthalate	84-74-2	1.54 mg/L (Fathead minnow)	N/Av	None.

<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Dibutyl phthalate	84-74-2	2.99 mg/L (Daphnia magna)	N/Av	None.

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Dibutyl phthalate	84-74-2	N/Av	N/Av	None.

**Persistence and degradability**

: Readily biodegradable.

**Bioaccumulation potential**

: There is no data available for this product.

<u>Components</u>	<u>Partition coefficient n-octanol/water (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Dibutyl phthalate (CAS 84-74-2)	2.9	2.8

**Mobility in soil** : There is no data available for this product.

**Other Adverse Environmental effects**

: None known or reported by the manufacturer.

### SECTION 13. DISPOSAL CONSIDERATIONS

**Handling for Disposal**

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

**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.









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### SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyl phthalate )	9	III	 
<b>49CFR/DOT Additional information</b>	None.				
TDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyl Phthlate)	9	III	 
<b>TDG Additional information</b>	May be shipped as a Limited Quantity when transported in containers no larger than 5 L (1.3 gallons); in packages not exceeding 30 kg (66 pounds) gross mass.				
ICAO/IATA	UN3082	Environmentally hazardous substance, liquid, n.o.s. (Dibutyl Phthlate)	9	III	 
<b>ICAO/IATA Additional information</b>	Refer to ICAO/IATA Packing Instruction				
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	9	III	 
<b>IMDG Additional information</b>	May be shipped as a Limited Quantity. Consult the IMDG regulations for details.				

**Special precautions for user** : None known or reported by the manufacturer.

**Environmental hazards** : See ECOLOGICAL INFORMATION, Section 12.

**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	
					Toxic Chemical	de minimus Concentration
Dibutyl phthalate	84-74-2	Yes	10 lb/ 4.54 kg	N/Av	Yes	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.



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### 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
Dibutyl phthalate	84-74-2	No	Developmental Toxicity;female reproductive 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	NewZealand IOC
Dibutyl phthalate	84-74-2	201-557-4	Present	Present	(3)-1303	KE-02214	Present	HSR002713

## SECTION 16. OTHER INFORMATION

### Legend

- : ACGIH: American Conference of Governmental Industrial Hygienists
- AICS: Australian Inventory of Chemical Substances
- ATE: Acute Toxicity Estimate
- CA: California
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- DOT: Department of Transportation
- EC: Effective Concentration
- EINECS: European Inventory of Existing Commercial chemical Substances
- ENCS: Existing and New Chemical Substances
- EPA: Environmental Protection Agency
- HMIS: Hazardous Materials Identification System
- HSDB: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- IATA: International Air Transport Association
- IBC: Intermediate Bulk Container
- ICAO: International Civil Aviation Organisation
- IECSC: Inventory of Existing Chemical Substances
- IMDG: International Maritime Dangerous Goods
- Inh: Inhalation
- IOC: Inventory of Chemicals
- KECI: Korean Existing Chemicals Inventory



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KECL: Korean Existing Chemicals List  
LC: Lethal Concentration  
LD: Lethal Dose  
MA: Massachusetts  
MARPOL: Marine Pollution  
MN: Minnesota  
MSHA: Mine Safety and Health Administration  
N/Av: Not Applicable  
N/Av: Not Available  
NFPA: National Fire Protection Association  
NIOSH: National Institute of Occupational Safety and Health  
NJ: New Jersey  
NOEC: No observable effect concentration  
NTP: National Toxicology Program  
OECD: Organisation for Economic Co-operation and Development  
OEL: National occupational exposure limits  
OSHA: Occupational Safety and Health Administration  
PA: Pennsylvania  
PEL: Permissible exposure limit  
PICCS: Philippine Inventory of Chemicals and Chemical Substances  
PPE: Personal Protective Equipment  
RCRA: Resource Conservation and Recovery Act  
RI: Rhode Island  
RQ: Reportable Quantity  
RTECS: Registry of Toxic Effects of Chemical Substances  
RTK: Right to Know  
SARA: Superfund Amendments and Reauthorization Act  
SDS: Safety Data Sheet / Material Safety Data Sheet  
STEL: Short Term Exposure Limit  
TDG: Canadian Transportation of Dangerous Goods Act & Regulations  
TLV: Threshold Limit Values  
TSCA: Toxic Substance Control Act  
TWA: Time Weighted Average  
VOC: Volatile Organic Compounds  
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 2017
- 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2017(Chempendium, HSDB and RTECs).
- 4. Material Safety Data Sheets from manufacturer.
- 5. US EPA Title III List of Lists - 2017 version.
- 6. California Proposition 65 List - 2017 version.
- 7. OECD - The Global Portal to Information on Chemical Substances - eChemPortal,2017.

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### Other special considerations for handling

: Provide adequate information, instruction and training for operators.

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<p><b><u>Prepared for:</u></b> Comet Chemical Company Ltd. 3463 Thomas Street Innisfill, ON L9S 3W4 Information (M-F 8:00-5:00): 705-436-5580 <a href="http://www.cometchemical.com">www.cometchemical.com</a></p>	
<p><b><u>Prepared by:</u></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>	

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