

## Dibutyl Phthalate

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Dibutyl Phthalate
<b>Other Means of Identification</b>	1,2-Benzenedicarboxylic acid dibutyl ester, DBP, Phthalic acid dibutyl ester
<b>Product Code(s)</b>	DI1510
<b>Product Family</b>	Organic solution
<b>Recommended Use</b>	Laboratory and industrial use.
<b>Restrictions on Use</b>	None known.
<b>Supplier Identifier</b>	Alphachem Limited, 2485 Milltower Court, Mississauga, Ontario, L5N 5Z6, (905) 821-2995
<b>Emergency Phone No.</b>	CANUTEC CANADA, 613-996-6666, 24 Hours
<b>SDS No.</b>	0692

### SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

#### Classification

Reproductive toxicity - Category 1B

#### Label Elements



Signal Word:  
Danger

#### Hazard Statement(s):

May damage the unborn child.  
May damage fertility.

#### Precautionary Statement(s):

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Use only outdoors or in a well-ventilated area.

#### Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF exposed or concerned: Get medical advice/attention.

#### Storage:

Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.

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Disposal:  
Dispose of contents and container in accordance with local, regional, national and international regulations.

**Other Hazards**

Very toxic to aquatic life.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance:

Chemical Name	CAS No.	%	Other Identifiers
Dibutyl phthalate	84-74-2	> 99	1,2-Benzenedicarboxylic acid dibutyl ester, DBP, Phthalic acid dibutyl ester

**SECTION 4. FIRST-AID MEASURES**

**First-aid Measures**

**Inhalation**

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). Remove source of exposure or move to fresh air. Get immediate medical advice or attention.

**Skin Contact**

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Immediately call a Poison Centre or doctor.

**Eye Contact**

Rinse the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes, while holding the eyelid(s) open. Immediately call a Poison Centre or doctor. Specific treatment is required.

**Ingestion**

Rinse mouth with water. Do not induce vomiting. Immediately call a Poison Centre or doctor.

**First-aid Comments**

Some of the first-aid procedures recommended here require advanced first-aid training. If exposed or concerned, get medical advice or attention.

**Most Important Symptoms and Effects, Acute and Delayed**

None known.

**Immediate Medical Attention and Special Treatment**

**Special Instructions**

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**SECTION 5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media**

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog. Use water to keep non-leaking, fire-exposed containers cool.

**Unsuitable Extinguishing Media**

Do not use a solid (straight) water stream as it may scatter and spread fire.

**Specific Hazards Arising from the Product**

Can ignite if strongly heated.

In a fire, the following hazardous materials may be generated:

1-butene

butanol

phthalic anhydride.

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### Special Protective Equipment and Precautions for Fire-fighters

Evacuate area. Fight fire from a safe distance or a protected location. Approach fire from upwind to avoid hazardous vapours or gases. Knock down vapours or gases with water fog or fine water spray. Use water spray to flush spills away from ignition sources. For a massive fire, immediately evacuate the area and use unmanned hose holder or monitor nozzles.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Evacuate downwind locations. Increase ventilation to area or move leaking container to a well-ventilated and secure area. Remove or isolate incompatible materials as well as other hazardous materials.

### Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

### Methods and Materials for Containment and Cleaning Up

Contain spill with earth, sand, or absorbent material which does not react with spilled material. Place used absorbent into suitable, covered, labelled containers for disposal.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Obtain special instructions before use. Wear personal protective equipment to avoid direct contact with this chemical. Avoid generating vapours or mists. Prevent uncontrolled release of product. Only use where there is adequate ventilation. Prevent accidental contact with incompatible chemicals. Never return unused or contaminated product to its original container. Keep containers tightly closed when not in use or empty.

### Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources, separate from incompatible materials (see Section 10: Stability and Reactivity). Protect from conditions listed in Conditions to Avoid in Section 10 (Stability and Reactivity). Keep amount in storage to a minimum. Store in the original, labelled, shipping container. Avoid bulk storage indoors.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Dibutyl phthalate	5 mg/m3		Not established			

### Appropriate Engineering Controls

Use local exhaust ventilation and enclosure, if necessary, to control amount in the air.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.

Suitable materials are: butyl rubber, nitrile rubber, polyvinyl alcohol, Viton®, Viton®/butyl rubber, Barrier® (PE/PA/PE), Silver Shield/4H® (PE/EVAL/PE).

The following materials should NOT be used: natural rubber, nitrile rubber, polyvinyl chloride.

#### Respiratory Protection

Wear a NIOSH approved particulate respiratory equipped with an N95, R95, or P95 filter.

Wear a NIOSH approved air-purifying respirator with N100, R100, or P100 filter(s).

Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Light yellow oily liquid.
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not applicable
<b>Melting Point/Freezing Point</b>	-35 °C (-31 °F) (melting); -35 °C (-31 °F) (freezing)
<b>Initial Boiling Point/Range</b>	340 °C (644 °F)
<b>Flash Point</b>	157 °C (315 °F) (closed cup)
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not applicable
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); 0.5% (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	9.58
<b>Relative Density (water = 1)</b>	1.047 at 20 °C
<b>Solubility</b>	Moderately soluble in water; Insoluble in alcohols (e.g. ethanol).
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	4.72 - 5.60
<b>Auto-ignition Temperature</b>	402 °C (756 °F)
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic); 21 mPa.s at 20 °C (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Liquid

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

Not sensitive to mechanical impact.

### Chemical Stability

Normally stable.

### Possibility of Hazardous Reactions

None known.

### Conditions to Avoid

High temperatures. Temperatures above 157.0 °C (314.6 °F)

### Incompatible Materials

Oxidizing agents (e.g. peroxides), strong acids (e.g. hydrochloric acid).

### Hazardous Decomposition Products

1-butene butanol phthalic anhydride.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Dibutyl phthalate	> 15680 mg/kg (rat) (4-hour)	6279 mg/kg (rat)	> 20000 mg/kg (rabbit)

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exposure)

### **Skin Corrosion/Irritation**

Human experience and animal tests show no or very mild irritation.

### **Serious Eye Damage/Irritation**

Animal tests show very mild irritation.

### **STOT (Specific Target Organ Toxicity) - Single Exposure**

#### **Inhalation**

No information was located.

#### **Ingestion**

No information was located.

### **Aspiration Hazard**

No information was located.

### **STOT (Specific Target Organ Toxicity) - Repeated Exposure**

Causes harmful effects on the liver. Blood tests may show abnormal results.

### **Respiratory and/or Skin Sensitization**

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

### **Carcinogenicity**

<b>Chemical Name</b>	<b>IARC</b>	<b>ACGIH®</b>	<b>NTP</b>	<b>OSHA</b>
Dibutyl phthalate	Not evaluated	Not designated	Not Listed	

### **Reproductive Toxicity**

#### **Development of Offspring**

Animal studies show effects on the offspring.

#### **Sexual Function and Fertility**

Animal studies show effects on sexual function and/or fertility.

#### **Effects on or via Lactation**

No information was located.

### **Germ Cell Mutagenicity**

Conclusions cannot be drawn from the limited studies available.

### **Interactive Effects**

No information was located.

## **SECTION 12. ECOLOGICAL INFORMATION**

This section is not required by WHMIS. This section is not required by OSHA HCS 2012.

## **SECTION 13. DISPOSAL CONSIDERATIONS**

### **Disposal Methods**

Bury in a licensed landfill or burn in an approved incinerator according to federal, provincial/state, and local regulations.

## **SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

**Special Precautions** Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## **SECTION 15. REGULATORY INFORMATION**

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## Safety, Health and Environmental Regulations

### Canada

#### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Listed on the DSL.

### USA

#### Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

## SECTION 16. OTHER INFORMATION

**NFPA Rating**                      **Health - 2**    **Flammability - 1**    **Instability - 0**

**SDS Prepared By**              Alphachem Limited

**Phone No.**                        (905)-821-2995

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**Date of Last Revision**        September 15, 2016

**References**                      CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).

**Disclaimer**                        This document is offered only as a guide in the safe handling of the above product, and has been prepared from the best information currently available. It is not intended to be all-inclusive and the conditions of use may involve other additional considerations. Since Alphachem Limited cannot anticipate or control the conditions under which the product may be used, it will not be liable for any claims, damages or losses which may result from the use or reliance on any information herein.