

# SAFETY DATA SHEET



Revision date: 27-Feb-2024

Revision Number 8

## Section 1: Identification

### Product identifier

**Product Name** DOP  
**Product Code(s)** 000030850601

### Other means of identification

**CAS No.** 117-81-7  
**Synonyms** Di(2-ethylhexyl) phthalate \* Di-sec-octyl phthalate \* Dioctyl phthalate \* DEHP.

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

**Recommended use** Plasticizer.  
**Uses advised against** No information available.

### Details of manufacturer or importer

#### **Supplier**

Ixom Operations Pty Ltd  
ABN: 51 600 546 512  
Level 8, 1 Nicholson Street  
Melbourne 3000  
Australia

Telephone Number: +61 3 9906 3000

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## Section 2: Hazard identification

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

### GHS Classification

<b>Carcinogenicity</b>	Category 1B
<b>Reproductive toxicity</b>	Category 1B

### Label elements

Health hazard



**Signal word**  
DANGER

**Hazard statements**

H350 - May cause cancer

H360FD - May damage fertility. May damage the unborn child

**Precautionary Statements - Prevention**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use personal protective equipment as required.

Avoid release to the environment.

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention.

Collect spillage.

**Precautionary Statements - Storage**

Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

**Other hazards which do not result in classification**

Very toxic to aquatic life.

Harmful to aquatic life with long lasting effects.

### Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
Dioctyl phthalate	117-81-7	>=99

### Section 4: First aid measures

**Description of first aid measures**

<b>General advice</b>	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.
<b>Inhalation</b>	Remove to fresh air. (Call a physician if symptoms occur).
<b>Eye contact</b>	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.
<b>Skin contact</b>	Wash skin with soap and water. (Call a physician if symptoms occur).
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

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

**Symptoms** No information available.

**Effects of Exposure** No information available.

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

**Note to physicians** Treat symptomatically.

## **Section 5: Firefighting measures**

### **Suitable Extinguishing Media**

**Suitable extinguishing media** Carbon dioxide (CO<sub>2</sub>). Dry powder. Dry sand.

**Unsuitable extinguishing media** Water.

### **Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Combustible liquid. Environmentally hazardous.

**Hazardous combustion products** Carbon oxides.

### **Special protective actions for fire-fighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## **Section 6: Accidental release measures**

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

**Personal precautions** Avoid contact with skin and eyes. Avoid breathing vapors or mists. Stop leak if you can do it without risk. Do not touch or walk through spilled material. Ensure adequate ventilation. Evacuate personnel to safe areas. Use personal protective equipment as required. Wash thoroughly after handling.

**For emergency responders** Use personal protection recommended in Section 8.

### **Environmental precautions**

**Environmental precautions** See Section 12 for additional Ecological Information.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

## **Section 7: Handling and storage**

### **Precautions for safe handling**

**Advice on safe handling** Avoid contact with skin and eyes. Avoid breathing vapors or mists. Ensure adequate

ventilation. Do not eat, drink or smoke when using this product. Use personal protection equipment. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice. Not to be used by pregnant workers and workers who have recently given birth or who are breastfeeding.

### **Conditions for safe storage, including any incompatibilities**

#### **Storage Conditions**

Keep in a dry, cool and well-ventilated place. Keep at temperatures between 5 and 35 °C. Keep container closed when not in use.

Classified as a C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

#### **Incompatible materials**

Strong oxidizing agents. Strong acids. Strong alkalis.

## **Section 8: Exposure controls and personal protection**

### **Control parameters**

#### **Exposure Limits**

Di-sec-octyl phthalate: 8hr TWA = 5 mg/m<sup>3</sup>, 15 min STEL = 10 mg/m<sup>3</sup>, Carcinogen Category 1B

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

Carcinogen Category 1B - presumed human carcinogen. There is sufficient evidence to provide a strong presumption that human exposure may result in the development of cancer. This evidence is generally based on appropriate long term animal studies, limited epidemiological evidence or other relevant information.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

### **Appropriate engineering controls**

#### **Engineering controls**

Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

### **Individual protection measures, such as personal protective equipment**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.



<b>Eye/face protection</b>	Glasses.
<b>Skin and body protection</b>	Wear suitable protective clothing. Protective shoes or boots. Overalls.
<b>Hand protection</b>	Impervious gloves. Do not use gloves made of polyvinyl chloride.
<b>Respiratory protection</b>	If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
<b>Environmental exposure controls</b>	No information available.
<b>Thermal hazards</b>	No information available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	No information available
<b>Color</b>	Colourless
<b>Odor</b>	Characteristic
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	7	None known
<b>pH (as aqueous solution)</b>	No data available	None known
<b>Melting point / freezing point</b>	-55°C	None known
<b>Boiling point / boiling range</b>	372.5°C	None known
<b>Flash point</b>	≥ 200°C	None known
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	0.15-0.18% (V/V)	
<b>Vapor pressure</b>	0.143 kPa @ 200°C	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	0.983 @ 20°C	None known
<b>Water solubility</b>	<0.01% @ 25°C	None known
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known

### Other information

**Section 10: Stability and reactivity****Reactivity****Reactivity** No information available.**Chemical stability****Stability** Stable under normal conditions.**Explosion data****Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.**Possibility of hazardous reactions****Possibility of hazardous reactions** None under normal processing.**Hazardous polymerization** Hazardous polymerization does not occur.**Conditions to avoid****Conditions to avoid** Heat, flames and sparks. Direct sunlight.**Incompatible materials****Incompatible materials** Strong oxidizing agents. Strong acids. Strong alkalis.**Hazardous decomposition products****Hazardous decomposition products** Carbon oxides.**Section 11: Toxicological information****Information on likely routes of exposure****Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:**Inhalation** Inhalation of vapors in high concentration may cause irritation of respiratory system.**Eye contact** May cause irritation.**Skin contact** May cause irritation.**Ingestion** May cause gastrointestinal discomfort if consumed in large amounts.**Symptoms** No information available.**Acute toxicity****Numerical measures of toxicity - Product Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Dioctyl phthalate	= 30 g/kg ( Rat )	= 25 g/kg ( Rabbit )	> 10620 mg/m <sup>3</sup> ( Rat ) 4 h

See section 16 for terms and abbreviations

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** May cause cancer.

Chemical name	Australia	European Union	IARC
Diocetyl phthalate - 117-81-7	Carc. 1B	-	Group 2B

#### **IARC (International Agency for Research on Cancer)**

Group 2B - Possibly Carcinogenic to Humans

**Reproductive toxicity** May damage fertility. May damage the unborn child.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

## **Section 12: Ecological information**

### Ecotoxicity

**Aquatic ecotoxicity** Keep out of waterways. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Diocetyl phthalate	EC50: >130mg/L (72h, <i>Desmodesmus subspicatus</i> ) EC50: >0.1mg/L (96h, <i>Pseudokirchneriella subcapitata</i> )	LC50: >0.16mg/L (96h, <i>Pimephales promelas</i> ) LC50: >0.200mg/L (96h, <i>Lepomis macrochirus</i> ) LC50: 0.27 - 0.67mg/L (96h, <i>Pimephales promelas</i> ) LC50: >0.32mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: >0.32mg/L (96h, <i>Oryzias latipes</i> ) LC50: >0.32mg/L (96h, <i>Brachydanio rerio</i> ) LC50: >0.32mg/L (96h,	-	EC50: >0.16mg/L (48h, <i>Daphnia magna</i> ) LC50: =9.4mg/L (48h, <i>Daphnia magna</i> )

		Poecilia reticulata) LC50: >0.67mg/L (96h, Oryzias latipes) LC50: >100mg/L (96h, Oncorhynchus mykiss)		
--	--	---	--	--

**Terrestrial ecotoxicity** There is no data for this product.

Chemical name	Earthworm	Avian	Honeybees
Diethyl phthalate	Acute Toxicity: LC50 > 25 mg/cm <sup>2</sup> (Eisenia foetida 48 h filter paper) Source: IUCLID	Dietary Toxicity: NOEC = 40000 ppm (Anas platyrhynchos 5 Days) Source: IUCLID	-

### Persistence and degradability

**Persistence and degradability** Readily biodegradable.

### Bioaccumulative potential

**Bioaccumulation** Material does not bioaccumulate.

### Component Information

Chemical name	Partition coefficient
Diethyl phthalate	5.03

### Mobility

**Mobility** No information available.

### Other adverse effects

**Other adverse effects** No information available.

### Endocrine Disruptor Information

Chemical name	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very High Concern (SVHC) for Authorisation	EU - REACH (1907/2006) - Endocrine Disruptor Assessment List of Substances
Diethyl phthalate	Endocrine disrupting properties	-

## **Section 13: Disposal considerations**

### Waste treatment methods

**Waste from residues/unused products** Refer to Waste Management Authority. Dispose of material through a licensed waste contractor.

**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

See section 8 for more information

## **Section 14: Transport information**



**ADG** Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

**IATA** Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

**IMDG** Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

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

No information available

## Section 15: Regulatory information

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

#### National regulations

##### Australia

Not classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). See section 8 for national exposure control parameters

#### **Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**

No poisons schedule number allocated

**Poison Schedule Number** Not applicable

#### **Australian Industrial Chemicals Introduction Scheme (AICIS)**

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Diethyl phthalate - 117-81-7	Present	Specific information requirement: Obligations to provide information apply. You must tell us within 28 days if the circumstances of your importation or manufacture (introduction) are different to those in our assessment.

#### **Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

#### **National pollutant inventory**

Subject to reporting requirement

Chemical name	National pollutant inventory
Diethyl phthalate - 117-81-7	10 tonne/yr Threshold category 1

#### **International Inventories**

##### **AIIC**

This material is listed on the Australian Inventory of Industrial Chemicals.

<b>NZIoC</b>	This material is listed on the New Zealand Inventory of Chemicals.
<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.

**Legend:****AIIIC- Australian Inventory of Industrial Chemicals****NZIoC - New Zealand Inventory of Chemicals****TSCA - United States Toxic Substances Control Act Section 8(b) Inventory****DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List****EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances****ENCS - Japan Existing and New Chemical Substances****IECSC - China Inventory of Existing Chemical Substances****KECL - Korean Existing and Evaluated Chemical Substances****PICCS - Philippines Inventory of Chemicals and Chemical Substances****International Regulations****The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**Section 16: Other information**

Supplier Material Safety Data Sheet , not dated.

**Reason(s) For Issue:** 5 Yearly Revised Primary SDS**Prepared By** This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).**Revision date:** 27-Feb-2024**Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorization:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate

LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
Australian Industrial Chemicals Introduction Scheme (AICIS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.**

**Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**End of Safety Data Sheet**