SAFETY DATA SHEET



Revision date: 27-Feb-2024

Revision Number 8

1. IDENTIFICATION OF T	HE MATERIAL AND SUPPLIER			
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 chemic	al and restrictions on use			
Recommended use	Plasticizer.			
Uses advised against	No information available			
Details of the supplier of the safe	ty data sheet			
Supplier Ixom Operations Pty Ltd (Incorporat NZBN: 9429041465226 Address: 16 Mt Maunganui South New Zealand				
Telephone Number: +64 9 368 2700 Facsimile: +64 9 368 2710)			
For further information, please co	intact			
Contact Point	Product Safety Department			
Emergency telephone number				
Emergency Telephone	0 800 734 607 (ALL HOURS)			
Please ensure you refer to the limitations of th	is Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.			
2. HAZARDS IDENTIFICA	TION			
Not classified as a Dangerous Good	under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.			
Classified as hazardous according t	o criteria in the Hazardous Substances (Hazard Classification) Notice 2020.			
GHS Classification				
SIGNAL WORD				

Danger

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2020 Approval Number: HSR002503

Reproductive toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

Label elements



Hazard statements

H360FD - May damage fertility. May damage the unborn child H373 - May cause damage to organs through prolonged or repeated exposure H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Do not breathe fume, gas, mist, vapours, spray Avoid contact during pregnancy/while nursing Avoid release to the environment **Precautionary Statements - Response** If exposed or concerned: Get medical advice/attention Get medical advice/attention if you feel unwell 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

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

4. FIRST AID MEASURES

Description of first aid measures

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.
Inhalation	Remove to fresh air. Call a physician if symptoms occur.
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. Call a physician if symptoms occur.

Ingestion	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 effect	cts, both acute and delayed			
Symptoms	No information available.			
Indication of any immediate medica	l attention and special treatment needed			
Note to physicians	Treat symptomatically.			
5. FIRE FIGHTING MEASU	RES			
Suitable Extinguishing Media				
Suitable Extinguishing Media	Carbon dioxide (CO2). Dry chemical. Dry sand.			
Unsuitable extinguishing media	Water.			
Specific hazards arising from the chemical				
Specific hazards arising from the chemical	Combustible liquid.			
Hazardous combustion products	Carbon oxides.			
Special protective actions for fire-fighters				
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

Personal precautions	Avoid contact with skin and eyes. Do not breathe vapor or mist. 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.		

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

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

Incompatible materials Strong oxidizing agents. Strong acids. Strong alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Di-sec-octyl phthalate (Di(2-ethylhexyl)phthalate): WES-TWA 5 mg/m³; WES-STEL 10 mg/m³

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

WES - STEL (Workplace Exposure Standard - Short Term Exposure Limits) - The 15 minute average exposure standard. Applies to any 15 minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both short-term and eight-hour, time-weighted average exposures should be determined.

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.



9. PHYSICAL AND CHEMICAL PROPERTIES

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Solubility(ies)

Information on basic physical and chemical properties				
Physical state	Liquid			
Appearance	No information available			
Color	Colourless			
Odor	Characteristic			
Odor threshold	No information available			
Property_	Values	Remarks • Method		
рН	7	None known		
Melting point / freezing point	-55°C	None known		
Boiling point / boiling range	372.5°C	None known		
Flash point	≥ 200°C	None known		
Evaporation rate	No data available	None known		
Flammability (solid, gas)	No data available	None known		
Flammability Limit in Air		None known		
Upper flammability or explosive limits	No data available			
Lower flammability or explosive limits	0.15-0.18% (V/V)			
Vapor pressure	0.143 kPa @200°C	None known		
Vapor density	No data available	None known		
Relative density	0.983 @20°C	None known		
Water solubility	<0.01% @ 25°C	None known		

No data available

None known

Partition coefficient Autoignition temperature Hyphen Kinematic viscosity Dynamic viscosity No data available None known None known None known None known None known

Other information

10. STABILITY AND REACTIVITY

<u>Reactivity</u>					
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					
Hazardous polymerization	Hazardous polymerization does not occur.				
Possibility of hazardous reactions	None under normal processing.				
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.					

11. TOXICOLOGICAL INFORMATION

Acute toxicity

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

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Dioctyl phthalate	= 30 g/kg (Rat)	= 25 g/kg (Rabbit)	> 10620 mg/m ³ (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 informatic	on available.		
Serious eye damage/eye irritation	No information available.			
Respiratory or skin sensitization	No information available.			
Germ cell mutagenicity	No information available.			
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.			
Chemical name		New Zealand	IARC	
Dioctyl phthalate - 117-81-7			Group 2B	
IARC (International Agency for	IARC (International Agency for Research on Cancer)			

IARC (International Agency for Research on Cancer) Group 2B - Possibly Carcinogenic to Humans

Reproductive toxicity	Not classified.
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STOT - single exposure	No information available.	
STOT - repeated exposure	Not classified.	

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Keep out of waterways. Toxic to aquatic life with long lasting effects.

Terrestrial ecotoxicity

There is no data for this product.

Chemical name	EarthWorm	Avian	Honeybees
Dioctyl phthalate	LC50 > 25 mg/cm2 (Eisenia	NOEC = 40000 ppm (Anas	-
	foetida 48 h filter paper)	platyrhynchos 5 Days)	

Chemical name	Algae/aquatic plants	Fish	Crustacea

Dioctyl phthalate	EC50: >130mg/L (72h,	LC50: >0.16mg/L (96h, Pimephales	EC50: >0.16mg/L (48h, Daphnia
	Desmodesmus subspicatus)	promelas)	magna)
	EC50: >0.1mg/L (96h,	LC50: >0.200mg/L (96h, Lepomis	LC50: =9.4mg/L (48h, Daphnia
	Pseudokirchneriella subcapitata)	macrochirus)	magna)
		LC50: 0.27 - 0.67mg/L (96h,	
		Pimephales promelas)	
		LC50: >0.32mg/L (96h,	
		Oncorhynchus mykiss)	
		LC50: >0.32mg/L (96h, Oryzias	
		latipes)	
		LC50: >0.32mg/L (96h, Brachydanio	
		rerio)	
		LC50: >0.32mg/L (96h, Poecilia	
		reticulata)	
		LC50: >0.67mg/L (96h, Oryzias	
		latipes)	
		LC50: >100mg/L (96h,	
		Oncorhynchus mykiss)	

Persistence and degradability		
Persistence and degradability	Readily biodegradable.	
Bioaccumulative potential		
Bioaccumulation	Material does not bioaccun	nulate.
<u>Mobility</u>		
Mobility in soil	No information available.	
Chemical na	me	Partition coefficient
Dioctyl phtha	late	5.03
Other adverse effects		

Other adverse effects

No information available.

Endocrine Disruptor Information

Chemical n	name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disrupters - Evaluated Substances	Endocrine disrupting potential
Dioctyl phth	nalate	Group I Chemical	High Exposure Concern	-

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products	Dispose of product in packaging/container in a way that is consistent with the Hazardous Substances (Disposal) Notice 2017 and the Act, and Hazardous Substances (Amendments and Revocations) Notice 2020. Treat the chemical using a method that changes the characteristics or composition of the chemical so that the chemical is no longer a hazardous chemical; or export the chemical from New Zealand as waste.
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.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT	Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land; NON-DANGEROUS GOODS.
<u>IATA</u>	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.

15. REGULATORY INFORMATION

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

New	Zealand	

National regulations	See section 8 for national exposure control parameters

International Inventories	
NZIoC	This material is listed on the New Zealand Inventory of Chemicals.
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AIIC	This material is listed on the Australian Inventory of Industrial Chemicals.

Legend:

NZIOC - New Zealand Inventory of Chemicals

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

DSL/NDSL - 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

AllC- Australian Inventory of Industrial Chemicals

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

16. OTHER INFORMATION

Supplier Material Safety Data Sheet , not dated.

Ltd at the contact details on page 1.

Prepared By	This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).	
Issuing Date:	22-Feb-2024	
Reason(s) For Issue:	5 Yearly Revised Primary SDS	
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		
LegendSection 8: EXPOSURE COITWATWA (time-weighCeilingMaximum limit vaCCarcinogen	ted average) STEL	N STEL (Short Term Exposure Limit) Skin designation
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) Japan GHS Classification Australia National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (IULM PUBMED) National Library of Medicine's PubMed database (NLM PUBMED) National Chemical Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Screening Information Data Set RTECS (Registry of Toxic Effects of Chemical Substances) World Health Organization		
<u>Disclaimer</u> 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		

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