



MATERIAL SAFETY DATA SHEET

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EMERGENCY No. 0419 341 095 any time

<http://www.nuvo.com.au>**PRODUCT: DIOCTYL PHTHALATE****PRODUCT NAME:** Di Octyl Phthalate**OTHER NAMES:** Di-sec-octyl phthalate, DOP, DEHP

UN NUMBER : None assigned
DANGEROUS GOODS :
CLASS & SUB RISK : Not applicable
HAZCHEM CODE : None assigned
PACKAGING GROUP : None assigned
POISONS SCHEDULE : Not scheduled
USES : As a plasticiser for flexible PVC.

STATEMENT OF HAZARDOUS NATURE:

Classified as not hazardous according to the criteria of Worksafe Australia.

PHYSICAL DESCRIPTION/PROPERTIES:

APPEARANCE/ODOUR : Colourless liquid / mild odour
BOILING POINT RANGE : 230-233°C at 7hPa
FLASHPOINT (°C) : 210°C
FLAMMABILITY LIMITS (%) : Not determined
VAPOUR PRESSURE : 8.6×10^{-4} Pa at 20°C
SOLUBILITY IN WATER : negligible
SPECIFIC GRAVITY : 1.045 at 25°C
DENSITY : 984kg/m³ at 20°C
OTHER PROPERTIES : pH: neutral, Pour point: -46°C

INGREDIENTS:

CHEMICAL ENTITY	CAS No.	PROPORTION
Bis(2-ethylhexyl)phthalate	117-81-7	99.6%

1. HEALTH HAZARD INFORMATION**Acute Health Hazards:**

Swallowed: Swallowing may have the following effects: gastrointestinal irritation. A large dose may have the following effects: central nervous system depression.

Eyes: Liquid or mist may cause slight transient irritation.

Skin: Material may cause slight skin irritation on prolonged or repeated contact.

Inhaled: High concentration (mist) may irritate the respiratory tract.

Other Hazards:

Possible risk of impaired fertility. Possible risk of harm to the unborn child.

2. FIRST AID

Swallowed: Rinse mouth with water. Give water to drink. If a large quantity has been ingested, obtain medical attention.

Eyes: Immediately flush liberally with water.

Skin : Remove contaminated clothing. Wash with soap and water.

Inhaled: If inhaled move victim to fresh air.

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First aid facilities: Provide eye bath and safety shower in the immediate vicinity of any potential exposure.

Advice to doctor: Treat symptomatically - see health hazards listed above.

3. PRECAUTIONS FOR USE

Exposure standards : UK 5mg/m³ (TWA), 10mg/m³ (STEL).

Engineering controls: Mechanically ventilate enclosed areas to control airborne levels below recommended exposure levels.

Personal protection: Eyes: Safety glasses; Hands/skin: Gloves.

Flammability:

FLASHPOINT (°C): 210°C (Pensky Martens Open Cup)

4. SAFE HANDLING INFORMATION**Storage & Transport:**

Store in closed containers in a dry and cool place. Not classified as dangerous goods under transport regulations. Handling of bulk quantities must be carried out in a bunded area.

Stability & Reactivity:

Chemically stable. Avoid Strong oxidising agents.

Spills & disposal:

Disposal should be carried out in accordance with national and local regulations e.g. in an approved incinerator. If correctly incinerated this material will decompose to carbon dioxide and water. All spillage should be cleared up quickly. Do not allow the material to enter surface water drains. If this should occur inform the local authorities immediately. Collect the material in a closed container or salvage tank and remove to a safe place for disposal by burning. Flush contaminated area with plenty of water. Contact local authorities for regulations on disposal.

Fire/Explosion Hazards:**Flammability:**

FLASHPOINT (°C) : 210°C (Pensky Martens Open Cup)

Fire Fighting Recommendations:

Extinguishing media : Carbon dioxide, dry chemical or water spray
Protective equipment : Wear self-contained breathing apparatus in a large fire
Special precautions : Prevent contaminated extinguishing water entering drains, sewers or rivers.

5. OTHER INFORMATION**Toxicity and Carcinogenicity:**

Acute Toxicity : LD50 (oral rat): >30,000mg/kg
LD50 (dermal, rabbit): >20,000mg/kg

Irritation : Primary skin irritation, rabbit: Not irritating
Primary eye irritation, rabbit: Not irritating

Sensitisation : Not a skin sensitiser

Other Toxicological Effects:**Toxicity to reproduction:**

Effects on reproduction (fertility effects and developmental toxicity) have been found in animal studies (rats and mice) when the material has been administered orally in high doses.

Subacute-chronic toxicity:

Rat and mouse: Liver and kidney effects, reversible testicular damage. When administered in the feed at high doses the material causes liver tumours. The effects on the liver are regarded as specific to rodents and there is no evidence to suggest that the material is a potential human carcinogen (WHO:1992).

Genotoxicity:

The material was not mutagenic when tested in bacterial or mammalian systems and did not covalently bind to DNA.

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Ecological Information:Acute toxicity, fish:

LC50, 96h,	Fathead minnow	>0.24-0.67mg/l	(NOEC)
	Rainbow trout	>0.32mg/l	(NOEC)
	Bluegill	>0.32mg/l	(NOEC)

No effect indicated below or near the water solubility of the product.

Acute toxicity, daphnia

LC50, 48h,	Daphnia magna	>0.32mg/l	(NOEC)
	Daphnia magna	>1mg/l*	(NOEC)
	(*dispersant added to increase solubility)		
	Daphnia pulex	>0.133mg/l	(result not considered reliable)

Acute toxicity, algae

EC50, 96h,	Seleastrum capricornatum:	>0.1mg/l	(NOEC)
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No effect indicated below or near the water solubility of the product.

Degradation

80% degradation (based on CO₂) after 28 days (Sturm test). The product is readily biodegradable.

Bioaccumulation

Bioaccumulation factor (BCF)

Bluegill sunfish, 3-5 days	log BCF=2.05	
Fathead minnow, 56days	log BCF=1.96-3.76	T _{1/2} =6-18 days
Golden orfe, 3 days	lob BCF=1.60	

Potential bioaccumulative, no indication of biomagnification.

6. REGULATORY INFORMATION:

Classification and labelling

Classification: Toxic to reproduction, category 3

Labelling: Symbol: Xn - harmful
 Risk phrases: R62 - Possible risk of impaired fertility
 R63 - Possible risk of harm to unborn child
 Safety phrases: S36/37 - Wear suitable protective clothing & gloves.

Preparations (e.g. plastisols) contained 6% or more of DOP will be classified and labelled in the same way.

7. INTERNATIONAL INVENTORY STATUS:

EINECS: Listed EINECS nr 204-211-0
 TSCA: Listed CAS nr 177-81-7
 DSL: Listed CAS nr 177-81-7
 MITI: Listed No C61-1472-1307
 AICS: Listed CAS nr 177-81-7

CONTACT POINT:	EMERGENCY No. 0419 341 095 all hours
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DISCLAIMER: The information given in this data sheet is based on data supplied by the manufacturer and is, to the best of our knowledge, true and accurate, but any recommendations or suggestions that may be made are without guarantee, since the conditions of use are beyond our control. The information and recommendations offered are for the user's consideration and it is the user's responsibility to satisfy themselves that they are suitable and complete for this particular purpose. We recommend that the safety and handling information presented in this data sheet be passed on, in an appropriate format, to your customers and handlers.