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IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Trade name	: Brake and Clutch Fluid DOT 4
Product name	: Brake Fluid DOT 4
Product type	: Hydraulic Brake Fluid
Supplier	: Unico Manufacturing Co. (PE) (Pty) Ltd.
Address	: 6 Celebes Road, Island View, Durban, South Africa
Contact number	: +27 (31) 466 1541/2
Emergency contacts	: Vishen Kanhai +27(64) 752 2197

Relevant identified uses of the substance or mixture

Industry sector :Automobile industryType of use :Brake fluid.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Additional Labelling

EUH210 Safety data sheet available on request.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

According to the present state of knowledge provided this product is handled correctly, there is no danger to humans or the environment

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.		(% w/w)
	Index-No.		
	Registration number		
Diethylene glycol	111-46-6	Acute Tox. 4; H302	>=1-<10
	203-872-2		
	603-140-00-6		
	01-2119457857-21		
	01-2119457857-21-		
	0002		
	01-2119457857-21-		
	0021		
	01-2119457857-21-		
	XXXX		

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Remove/ Take off immediately all contaminated clothing. Get medical advice/ attention if you feel unwell.
If inhaled	:	If inhaled, remove to fresh air. Get medical advice/ attention.
In case of skin contact	:	In case of contact, immediately flush skin with soap and plenty of water.
In case of eye contact	:	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed	:	If swallowed do not induce vomiting, seek medical advice and show safety datasheet or label
4.2 Most important symptoms and	d e	ffects, both acute and delayed
Symptoms	:	No symptoms known currently.
Risks	:	No hazards known at this time.
4.3 Indication of any immediate m	ed	ical attention and special treatment needed

4.3

Treatment

: Treat symptomatically.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Water spray jet Alcohol-resistant foam Dry powder Carbon dioxide (CO2)
Unsuitable extinguishing media	: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during	: In case of fires, hazardous combustion gases are formed:
firefighting	Carbon monoxide (CO) Carbon dioxide (CO2)
	Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for firefighters	: Self-contained breathing apparatus
Further information	: Wear suitable protective equipment.

SECTION 6: Accidental release measures

	ctive equipment and emergency procedures
Personal precautions	: Wear suitable protective equipment. Ensure adequate ventilation.
6.2 Environmental precautions	
Environmental precautions	: The product should not be allowed to enter drains, water courses or the soil.
6.3 Methods and material for cor	ntainment and cleaning up
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust). Treat recovered material as described in the section "Disposal considerations".
•

6.4 Reference to other sections

Information regarding Safe handling, see chapter 7., For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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Advice on safe handling	: When used and handled appropriately no special measures are needed
Advice on protection against fire and explosion	: Observe the general rules of industrial fire protection
Hygiene measures	: Wash hands before breaks and at the end of workday. Use protective skin cream before handling the product. Take off immediately all contaminated clothing and wash it before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Further information on	:	Keep containers tightly closed in a cool, well-ventilated place.
storage conditions		Handle and open container with care.

7.3 Specific end use(s)

Specific use(s)

: No further recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Diethylene glycol CAS-No.: 111-46-6	Workers	Dermal	Long-term systemic effects	43 mg/kg bw/day
Remarks:	DNEL			
	Workers	Inhalation	Long-term local effects	60 mg/m3
Remarks:	DNEL			
	General population	Dermal	Long-term systemic effects	21 mg/kg bw/day
Remarks:	DNEL			
	General population	Inhalation	Long-term local effects	12 mg/m3
Remarks:	DNEL			
	Workers	Inhalation	Long-term systemic effects	44 mg/m3
Remarks:	DNEL	-		
	General population	Inhalation	Long-term systemic effects	12 mg/m3
Remarks:	DNEL			
Triethylene glycol CAS-No.: 112-27-6	Workers	Dermal	Long-term systemic effects	40 mg/kg bw/day
Remarks:	DNEL			
	Workers	Inhalation	Acute local effects	50 mg/m3
Remarks:	DNEL			

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	General population	Dermal	Long-term systemic effects	20 mg/kg bw/day
Remarks:	DNEL			
	General population	Inhalation	Acute local effects	25 mg/m3
Remarks:	DNEL			
Triethylene glycol methyl ether CAS-No.: 112-35-6	Workers	Dermal	Long-term systemic effects	167 mg/kg bw/day
Remarks:	DNEL			
	General population	Dermal	Long-term systemic effects	100 mg/kg bw/day
Remarks:	DNEL			
	General population	Ingestion	Long-term systemic effects	10 mg/kg bw/day
Remarks:	DNEL			
Reaction mass of 3,6,9,12- tetraoxotridecan-1-ol and 3,6,9,12,15- pentaoxahexadecan- 1-ol	Workers	Dermal	Long-term systemic effects	167 mg/kg bw/day
Remarks:	DNEL			
	Workers	Inhalation	Long-term systemic effects	156 mg/m3
Remarks:	DNEL	-	-	
	General population	Dermal	Long-term systemic effects	100 mg/kg bw/day
Remarks:	DNEL			
	General population	Inhalation	Long-term systemic effects	104 mg/m3
Remarks:	DNEL			
	General population	Oral	Long-term systemic effects	10 mg/kg bw/day
Remarks:	DNEL			

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Diethylene glycol	Fresh water sediment	20,9 mg/kg dry
CAS-No.: 111-46-6		weight (d.w.)
	Soil	1,53 mg/kg dry
		weight (d.w.)
	Sewage treatment plant	199,5 mg/l
	Fresh water	10 mg/l
	Marine water	1 mg/l
	Marine sediment	2,09 mg/kg dry weight (d.w.)
Triethylene glycol CAS-No.: 112-27-6	Fresh water	10 mg/l
	Marine water	1 mg/l
	Fresh water sediment	46 mg/kg dry
		weight (d.w.)

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	Marine sediment	4,6 mg/kg dry weight (d.w.)
	Soil	3,32 mg/kg dry weight (d.w.)
	Sewage treatment plant	10 mg/l
Triethylene glycol methyl ether CAS-No.: 112-35-6	Fresh water	10 mg/l
	salt water	1 mg/l
	Water (intermittent release)	50 mg/l
	Fresh water sediment	36,6 mg/kg dry weight (d.w.)
	Marine sediment	3,66 mg/kg dry weight (d.w.)
	Soil	1,56 mg/kg dry weight (d.w.)
	Sewage treatment plant	200 mg/l
	Oral	89 mg/kg food
Reaction mass of 3,6,9,12- tetraoxotridecan-1-ol and 3,6,9,12,15-pentaoxahexadecan- 1-ol	Fresh water	10 mg/l
	salt water	1 mg/l
	Water (intermittent release)	100 mg/l
	Fresh water sediment	36,5 mg/kg dry weight (d.w.)
	Marine sediment	3,65 mg/kg dry weight (d.w.)
	Soil	1,53 mg/kg dry weight (d.w.)
	Sewage treatment plant	200 mg/l
	Oral	90 mg/kg food

8.2 Exposure controls

Personal protective equipment

Personal protective equipment	
Eye protection :	Safety glasses
Glove thickness :	480 min 0,7 mm Long-term exposure Impervious butyl rubber gloves
Glove thickness :	30 min 0,4 mm For short-term exposure (splash protection): Nitrile rubber gloves.
Remarks :	These types of protective gloves are offered by various manufacturers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time. Consider also the particular working conditions under which the gloves are being used.

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Skin and body protection	: Wear suitable protective equipment.
Respiratory protection	: Use respiratory protection in case of insufficient exhaust ventilation or prolonged exposure
Protective measures	: Observe the usual precautions for handling chemicals.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: yellow
Odour	: characteristic
Odour Threshold	: not tested.
рН	: 9 - 10 (25 °C) Concentration: 50 %
Solidification point	: ca65 °C
Boiling point	: > 250 °C
Flash point	: ca. 136 °C
Evaporation rate	: not tested.
Flammability (solid, gas)	: Not applicable
Burning number	: Not applicable
Upper explosion limit / upper flammability limit	: Not relevant
Lower explosion limit / Lower flammability limit	: Not relevant
Vapour pressure	: <1 hPa
Relative vapour density	: not tested.
Density	: ca. 1,0672 g/cm3 (20 °C)
Bulk density	: Not applicable
Solubility(ies) Water solubility	: completely miscible
Solubility in other solvents	: not tested. Solvent: fat

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Partition coefficient: n- octanol/water	: Not applicable
Auto-ignition temperature	: not tested.
Decomposition temperature	: not tested.
Viscosity Viscosity, kinematic	: ca. 757 mm2/s (-40 °C) ca. 1,81 mm2/s (100 °C)
Explosive properties	: no data available
Oxidizing properties	: Not applicable
9.2 Other information Metal corrosion rate Minimum ignition energy Particle size	Not corrosive to metalsnot tested.Not applicable

SECTION 10: Stability and reactivity

Self-ignition

10.1 Reactivity	
See section 10.3. "Possibility of	nazardous reactions"
10.2 Chemical stability	
hygroscopic	
10.3 Possibility of hazardous react	ions
Hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4 Conditions to avoid	
Conditions to avoid	None known.
10.5 Incompatible materials	
Materials to avoid	not known

: Not applicable

10.6 Hazardous decomposition products

When handled and stored appropriately, no dangerous decomposition products are known

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

1.1	Information on toxicological	eff	ects
	Acute toxicity		
	Product:		
	Acute oral toxicity	:	Acute toxicity estimate: > 2.000 mg/kg Method: Calculation method
	Acute inhalation toxicity	:	Remarks: not tested.
	Acute dermal toxicity	:	Remarks: not tested.
	Components:		
	Diethylene glycol:		
	Acute oral toxicity	:	LD50 (Rat, male): 19.600 mg/kg Method: Other GLP: no Assessment: The component/mixture is moderately toxic after single ingestion.
	Skin corrosion/irritation		
	Product:		
	Remarks	:	not tested.
	Components:		
	Diethylene glycol:		
	Species Exposure time Method Result GLP	::	Rabbit 23 h Draize Test No skin irritation no
	Serious eye damage/eye irrita	atio	on
	Product:		
	Remarks	:	not tested.
	Components:		
	Diethylene glycol:		
	Species Method Result GLP	:	Rabbit Other No eye irritation no

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Respiratory or skin sens	itisation		
Product:			
Remarks	: not tested.		
Components:			
Diethylene glycol:			
Test Type	: Maximisation Test		
Exposure routes	: Dermal		
Species Method	: Guinea pig : Directive 67/548/EEC, Annex	VB6	
Result	: Not a skin sensitizer.	v, D.U.	
GLP	: yes		
Assessment	: Harmful if swallowed.		
Germ cell mutagenicity			
Product:			
Germ cell mutagenicity- Assessment	: No information available.		
Components:			
Diethylene glycol:			
Genotoxicity in vitro	 Test Type: Ames test Test system: Salmonella typh Concentration: 33 - 5000 μg/p Metabolic activation: with and Method: OECD Test Guidelin Result: negative GLP: yes 	olate without metaboli	c activation
	Test Type: Ames test Test system: Escherichia coli Concentration: 33 - 5000 µg/p Metabolic activation: with and Method: OECD Test Guidelin Result: negative GLP: yes	without metaboli	c activation
Genotoxicity in vivo	: Test Type: Micronucleus test Species: Mouse (male) Strain: NMRI Cell type: Bone marrow Application Route: Intraperito Exposure time: once Dose: 500 - 1000 - 2000 mg/k Method: OECD Test Guidelin Result: negative GLP: yes	٢g	

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Germ cell mutagenicity- Assessment	: In vivo tests did not show mu not show mutagenic effects	tagenic effects, Ir	n vitro tests did
Carcinogenicity Product:			
Carcinogenicity - Assessment	: No information available.		
Components:			
Diethylene glycol: Carcinogenicity - Assessment	: Animal testing did not show a	any carcinogenic	effects.
Reproductive toxicity <u>Product:</u> Reproductive toxicity - Assessment	: No information available. No information available.		
Components:			
Diethylene glycol:			
Effects on fertility	: Test Type: Two-generation s Species: Mouse, male and fe Strain: CD1 Application Route: Drinking w Dose: 612 - 3063 - 6125 mg/ General Toxicity - Parent: NC Method: Other GLP: No information availabl	male vater kg DAEL: 3.060 mg/k	g body weight
Effects on foetal development	: Test Type: Pre-natal Species: Rabbit, female Application Route: oral (gava Dose: 100 - 400 - 1000 mg/k Duration of Single Treatment General Toxicity Maternal: N Teratogenicity: NOAEL: > 1.0 Method: OECD Test Guidelin GLP: yes	g : 12 d OAEL: 1.000 mg/ 000 mg/kg body w	
Reproductive toxicity - Assessment	: No reproductive toxicity to be No teratogenic effects to be e		
STOT - single exposure			
Product:			

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Remarks	: not tested.		
Components:			
Diethylene glycol:			
Assessment	: The substance or mixture organ toxicant, single expo		pecific target
STOT - repeated exposu	re		
Product:			
Remarks	: not tested.		
Components:			
Diethylene glycol:			
Assessment	: The substance or mixture organ toxicant, repeated e		pecific target
Repeated dose toxicity			
Product:			
Remarks	: not tested.		
Components:			
Diethylene glycol:			
Diethylene glycol: Species	: Rat, male and female		
Species NOAEL	: 936 mg/kg bw/day		
Species NOAEL Application Route	: 936 mg/kg bw/day : oral (feed)		
Species NOAEL Application Route Exposure time	: 936 mg/kg bw/day : oral (feed) : 4 w		
Species NOAEL Application Route	: 936 mg/kg bw/day : oral (feed)	g/kg diet	
Species NOAEL Application Route Exposure time Number of exposures Dose Control Group	: 936 mg/kg bw/day : oral (feed) : 4 w : daily : 500-2500-10000-40000mg : yes		
Species NOAEL Application Route Exposure time Number of exposures Dose Control Group Method	 936 mg/kg bw/day oral (feed) 4 w daily 500-2500-10000-40000mg yes OECD Test Guideline 407 		
Species NOAEL Application Route Exposure time Number of exposures Dose Control Group	: 936 mg/kg bw/day : oral (feed) : 4 w : daily : 500-2500-10000-40000mg : yes		
Species NOAEL Application Route Exposure time Number of exposures Dose Control Group Method GLP Species	 936 mg/kg bw/day oral (feed) 4 w daily 500-2500-10000-40000mg yes OECD Test Guideline 407 yes Dog, male 		
Species NOAEL Application Route Exposure time Number of exposures Dose Control Group Method GLP Species NOAEL	 936 mg/kg bw/day oral (feed) 4 w daily 500-2500-10000-40000mg yes OECD Test Guideline 407 yes Dog, male 2200 mg/kg bw/day 		
Species NOAEL Application Route Exposure time Number of exposures Dose Control Group Method GLP Species NOAEL Application Route	 936 mg/kg bw/day oral (feed) 4 w daily 500-2500-10000-40000mg yes OECD Test Guideline 407 yes Dog, male 2200 mg/kg bw/day Skin contact 		
Species NOAEL Application Route Exposure time Number of exposures Dose Control Group Method GLP Species NOAEL	 936 mg/kg bw/day oral (feed) 4 w daily 500-2500-10000-40000mg yes OECD Test Guideline 407 yes Dog, male 2200 mg/kg bw/day 		
Species NOAEL Application Route Exposure time Number of exposures Dose Control Group Method GLP Species NOAEL Application Route Exposure time	 936 mg/kg bw/day oral (feed) 4 w daily 500-2500-10000-40000mg yes OECD Test Guideline 407 yes Dog, male 2200 mg/kg bw/day Skin contact 4 w 		
Species NOAEL Application Route Exposure time Number of exposures Dose Control Group Method GLP Species NOAEL Application Route Exposure time Number of exposures Dose Control Group	 936 mg/kg bw/day oral (feed) 4 w daily 500-2500-10000-40000mg yes OECD Test Guideline 407 yes Dog, male 2200 mg/kg bw/day Skin contact 4 w daily 0,5 - 2 - 8 ml/kg yes 		
Species NOAEL Application Route Exposure time Number of exposures Dose Control Group Method GLP Species NOAEL Application Route Exposure time Number of exposures Dose	 936 mg/kg bw/day oral (feed) 4 w daily 500-2500-10000-40000mg yes OECD Test Guideline 407 yes Dog, male 2200 mg/kg bw/day Skin contact 4 w daily 0,5 - 2 - 8 ml/kg 		

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Aspiration toxicity

Components:

Diethylene glycol:

No aspiration toxicity classification

SECTION 12: Ecological information

12.1 Toxicity

Product:	
Toxicity to fish	: Remarks: not tested.
Toxicity to daphnia and other aquatic invertebrates	: Remarks: not tested.
Toxicity to algae/aquatic plants	: Remarks: not tested.
Toxicity to microorganisms	: Remarks: not tested.
Components:	
Diethylene glycol:	
Toxicity to fish	 LC50 (Pimephales promelas (fathead minnow)): 75.200 mg/l End point: mortality Exposure time: 96 h Test Type: flow-through test Analytical monitoring: yes Method: Other GLP: no
Toxicity to daphnia and other aquatic invertebrates	 EC50 (Daphnia magna (Water flea)): > 10.000 mg/l Exposure time: 24 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: no Remarks: The details of the toxic effect relate to the nominal concentration.
Toxicity to algae/aquatic plants	: EC50 (green algae): 9.362 mg/l Exposure time: 96 h Analytical monitoring: no Method: estimated GLP: no
Toxicity to microorganisms	: EC20 (activated sludge): > 1.995 mg/l Exposure time: 0,5 h Test Type: static test Analytical monitoring: no

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	Method: ISO 8192 GLP: no		
Toxicity to fish (Chronic toxicity)	: Chronic Toxicity Value: 7.694 End point: Other Exposure time: 30 d Species: Fish Method: Other GLP: no Remarks: The value is given using OECD Toolbox, DERE (CAESAR models), etc.	based on a SAR/	
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: Chronic Toxicity Value: 1.89 Exposure time: 16 d Species: Daphnia sp. (water Method: Other GLP: no	-	
Toxicity to soil dwelling organisms	: LC50: 10.974 mg/kg Exposure time: 63 d End point: mortality Species: Eisenia andrei (red Method: Other GLP:No information available		
	LC50: 15.689 mg/kg Exposure time: 28 d End point: mortality Species: Folsomia candida Method: Other GLP:No information available	9.	
Plant toxicity	: EC50: 18.102 mg/kg Exposure time: 14 d End point: emergence Species: Medicago sativa L. Method: Other GLP:yes		
12.2 Persistence and degradabilit	y		
Product:			
Biodegradability	: Remarks: Not applicable		
Components:			
Diethylene glycol:			
Biodegradability	: Test Type: aerobic Inoculum: activated sludge Concentration: 44 mg/l Result: Readily biodegradabl Biodegradation: 70 - 80 %	e.	

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	Related to: Carbon dioxide (C Exposure time: 28 d Method: OECD Test Guideline		
	GLP: no Test Type: aerobic Inoculum: activated sludge Concentration: 45 mg/l Result: Biodegradable Biodegradation: 90 - 100 % Related to: Dissolved organic Exposure time: 28 d Method: OECD Test Guideline GLP: yes		
12.3 Bioaccumulative potential			
Product:			
Bioaccumulation	: Remarks: not tested.		
Components:			
Diethylene glycol:			
Bioaccumulation	: Species: Leuciscus idus (Gold Exposure time: 3 d Concentration: 0,05 mg/l Bioconcentration factor (BCF) Method: Other GLP: no	·	
12.4 Mobility in soil			
Product:			
Distribution among environmental compartments	: Remarks: not tested.		
Components:			
Diethylene glycol:			
Distribution among environmental compartments	: Adsorption/Soil Medium: water - soil log Koc: 0 Method: other (calculated)		
12.5 Results of PBT and vPvB ass	sessment		
Product:			
Assessment	: This substance/mixture contain to be either persistent, bioacc very persistent and very bioact 0.1% or higher	umulative and to	oxic (PBT), or

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Components:			
Diethylene glycol:			
Assessment	: This substance is not considered to be persistent, bioaccumulating and toxic (PBT)		
.6 Other adverse effects			
Deschust			

Product:	
Environmental fate and pathways	: no data available
Additional ecological information	: The product has not been tested. The information is derived from the properties of the individual components.
Components:	
Diethylene glycol:	
Environmental fate and pathways	: not available
Additional ecological information	: Do not allow to enter ground water, waterways or waste water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	: Product should be taken to a suitable and authorized waste disposal site in accordance with relevant regulations and if necessary after consultation with the waste disposal operator and/or the competent Authorities	r
Contaminated packaging	: Packaging that cannot be cleaned should be disposed of as product waste	

SECTION 14: Transport information

Section 14.1. to 14.5.

ADR	not restricted
ADN	not restricted
RID	not restricted
ΙΑΤΑ	not restricted
IMDG	not restricted

14.6. Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code (International Bulk Chemicals Code)

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No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	÷	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable

Other regulations:

Apart from the data/regulations specified in this chapter, no further information is available concerning safety, health and environmental protection.

15.2 Chemical safety assessment

No Chemical Safety Assessment (CSA) is yet available for the substance, or for the component substances, contained in this product.

SECTION 16: Other information

Full	text	of	H-Statements
------	------	----	---------------------

H302 : Harmful if swallowed.

Full text of other abbreviations

Acute Tox. : Acute toxicity

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -

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International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -

International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information

Observe national and local legal requirements

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