

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : SHELL BRAKE & CLUTCH FLUID DOT4

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Intended for general public
Use of the substance/mixture : Brake fluid
Professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Kemetyl Kimya San.Tic.Ltd.Şti.
Küçükbakkalköy Mahallesi Dereboyu Caddesi No:3A Brandium AVYM R/5 Blok K:13 D:82
Ataşehir, İstanbul
T +90-216 455 1641 - 42
salesKTR@kemetyl.com - www.kemetyl.com.tr

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Turkey	Ulusal Zehir Merkezi (UZEM) Refik Saydam Hıfzıssıhha Merkezi Başkanlığı	Cemal Gürsel Cd. No: 18 Sıhhiye Çankaya 06590 Ankara	114	Information is provided to public and medical personnel on poisoning incidents via 114.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Reproductive toxicity, Category 2 H361

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

Suspected of damaging fertility or the unborn child.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) : Warning
Contains : tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] borate
Hazard statements (CLP) : H361 - Suspected of damaging fertility or the unborn child.
Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.

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P201 - Obtain special instructions before use.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Child-resistant fastening : Not applicable
Tactile warning : Applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] borate	CAS-No.: 30989-05-0 EC-No.: 250-418-4	25 – 30	Repr. 2, H361d
Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol	EC-No.: 907-996-4	15 – 20	Eye Dam. 1, H318
2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether substance with a Community workplace exposure limit	CAS-No.: 111-77-3 EC-No.: 203-906-6 EC Index-No.: 603-107-00-6 REACH-no: 01-2119475100-52	0.1 – 1	Repr. 2, H361d
2,6-Di-tert-butyl-p-cresol	CAS-No.: 128-37-0 EC-No.: 204-881-4	0.1 – 0.25	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Specific concentration limits

Name	Product identifier	Specific concentration limits
Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol	EC-No.: 907-996-4	(5 ≤C < 20) Eye Irrit. 2, H319 (30 ≤C < 100) Eye Dam. 1, H318

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Never give anything by mouth to an unconscious person. People with over sensibility problems are not allowed to work or be exposed to the product. In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Place the affected person in the recovery position. If breathing stops, give artificial respiration. If experiencing respiratory symptoms: Call a poison center or a doctor.

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First-aid measures after skin contact	: Wash skin with plenty of water. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Do not remove clothing if it sticks to the skin. Get medical attention if symptoms occur.
First-aid measures after eye contact	: Rinse eyes with water as a precaution. Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist if irritation persists.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Foam. Carbon dioxide. Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO ₂).
Unsuitable extinguishing media	: Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Contact with combustible material may cause fire.
Explosion hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Reactivity in case of fire	: At high temperature may liberate dangerous gases.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire	: Keep away from combustible materials. Approach from upwind.
Firefighting instructions	: Exercise caution when fighting any chemical fire. Do not enter fire area without proper protective equipment, including respiratory protection. Keep upwind. Use water spray or fog for cooling exposed containers. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: High temperature decomposition products are harmful by inhalation. Inhalation of vapour can cause breathing difficulties.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Notify authorities if product enters sewers or public waters. Use care in walking on spilled material.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. Mark out the contaminated area with signs and prevent access to unauthorized personnel. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection". Only qualified personnel equipped with suitable protective equipment may intervene.
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Emergency procedures : Keep public away from danger area. Evacuate unnecessary personnel. Stop leak if safe to do so. Do not touch spilled material. Avoid contact with skin and eyes. Ventilate area. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses. Do not discharge into drains or waterways without neutralizing.

6.3. Methods and material for containment and cleaning up

For containment : Comply with the safety instructions.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Clean up any spills as soon as possible, using an absorbent material to collect it. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Sweep or shovel spills into appropriate container for disposal. Minimise generation of dust.
Other information : Dispose of materials or solid residues at an authorized site. Dispose of contaminated materials in accordance with current regulations.

6.4. Reference to other sections

For further information refer to section 13. Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Ensure good ventilation of the work station.
Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid dust formation. Avoid prolonged and repeated contact with skin. Contaminated work clothing should not be allowed out of the workplace. Do not spray on an open flame or other ignition source.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation, especially in confined areas. Comply with applicable regulations.
Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.
Incompatible products : Strong acids. Strong bases. Strong oxidizing agents.
Incompatible materials : Extremely high or low temperatures.
Heat and ignition sources : Do not smoke. Keep away from sources of ignition. Keep away from heat and direct sunlight.
Information on mixed storage : Keep away from food, drink and animal feeding stuffs.
Storage area : Avoid: Extremely high or low temperatures. Heat and ignition sources.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)	
Turkey - Occupational Exposure Limits	
Local name	2-(2-Metoksietoksi)etanol
OEL TWA	50.1 mg/m ³
OEL TWA [ppm]	10 ppm
Comments	Deri
Regulatory reference	12 Ağustos 2013 Tarihli ve 28733 Sayılı Resmî Gazete

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Avoid contact with skin, eyes and clothing.

8.2.2. Personal protection equipment

Personal protective equipment:

Protective clothing. Safety glasses. Gloves. Self-contained breathing apparatus.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses. Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

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8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Consumer exposure controls:

Do not eat, drink or smoke during use. Always wash hands after handling the product. Avoid contact with skin and eyes. Avoid contact during pregnancy/while nursing.

Other information:

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: amber. colourless to amber.
Odour	: characteristic.
Odour threshold	: No data available
pH	: 9
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: > 155 °C
Flash point	: > 60 °C
Auto-ignition temperature	: 350 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.02 – 1.09
Density	: 1 – 1.1 kg/m ³ 20°C
Solubility	: soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: -1.75 TRIETHYLENE GLYCOL
Partition coefficient n-octanol/water (Log Kow)	: 0.51 Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol
Viscosity, kinematic	: 1050 mm ² /s -40°C
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

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10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

SHELL BRAKE & CLUTCH FLUID DOT4	
LD50 oral rat	2630 mg/kg bodyweight ethanol, 2-butoxy-, manufacture of, by-products from
LD50 oral	2,2' -OXYBISETHANOL, DIETHYLENE GLYCOL (111-46-6)
LD50 dermal rat	3540 mg/kg bodyweight ethanol, 2-butoxy-, manufacture of, by-products from
LD50 dermal rabbit	11890 mg/kg 2,2' -OXYBISETHANOL, DIETHYLENE GLYCOL (111-46-6)
LD50 dermal	6200 – 7500 mg/kg 2,2' -oxybisethanol
LC50 Inhalation - Rat (Dust/Mist)	> 2,2' -oxybisethanol

tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] borate (30989-05-0)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EU Method B.1 (Acute Toxicity (Oral))
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Remarks on results: other:

2,2'-(ethylenedioxy)diethanol (112-27-6)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat

2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)	
LD50 oral	5500 mg/kg bodyweight
LD50 dermal	6540 mg/kg bodyweight
ATE CLP (oral)	5500 mg/kg bodyweight
ATE CLP (dermal)	6540 mg/kg bodyweight

2,6-Di-tert-butyl-p-cresol (128-37-0)	
LD50 oral rat	> 2930 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Not classified
pH: 9
Serious eye damage/irritation : Not classified
pH: 9
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

2,2'-(ethylenedioxy)diethanol (112-27-6)	
NOAEL (chronic, oral, animal/male, 2 years)	1210 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)

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2,2'-(ethylenedioxy)diethanol (112-27-6)	
NOAEL (chronic, oral, animal/female, 2 years)	1160 mg/kg bodyweight Animal: rat, Animal sex: female, Remarks on results: other:Effect type: carcinogenicity (migrated information)
2,6-Di-tert-butyl-p-cresol (128-37-0)	
NOAEL (chronic, oral, animal/male, 2 years)	25 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: toxicity (migrated information)
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] borate (30989-05-0)	
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
2,6-Di-tert-butyl-p-cresol (128-37-0)	
LOAEL (oral, rat, 90 days)	100 mg/kg bodyweight Animal: rat, Animal sex: male
NOAEL (oral, rat, 90 days)	25 mg/kg bodyweight Animal: rat, Animal sex: male
Aspiration hazard	: Not classified
SHELL BRAKE & CLUTCH FLUID DOT4	
Viscosity, kinematic	1050 mm ² /s -40°C

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

SHELL BRAKE & CLUTCH FLUID DOT4	
EC50 72h - Algae [1]	2-(2-(2-methoxyethoxy)ethoxy)ethanol Param
NOEC chronic fish	133 g/l 2-(2-(2-methoxyethoxy)ethoxy)ethanol Param
tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] borate (30989-05-0)	
LC50 - Fish [1]	> 222.2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
LC50 - Fish [2]	> 1010 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 211.2 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	> 960 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 224.4 mg/l Test organisms (species): other:
EC50 72h - Algae [2]	> 1020 mg/l Test organisms (species): other:
Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol	
LC50 - Fish [1]	> 1800 mg/l Test organisms (species): other:

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Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol	
EC50 - Crustacea [1]	> 3200 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	1075 mg/l Test organisms (species): Scenedesmus capricornutum
EC50 72h - Algae [2]	2490 mg/l Test organisms (species): Scenedesmus capricornutum
NOEC (chronic)	> 100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
2,2'-(ethylenedioxy)diethanol (112-27-6)	
LC50 - Fish [1]	> 10000 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	> 10000 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	> 15000 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)	
LC50 - Fish [1]	7500 mg/l
EC50 - Crustacea [1]	> 500 mg/l
EC50 - Other aquatic organisms [1]	1192 mg/l EC50 waterflea (48 h)
EC50 - Other aquatic organisms [2]	> 500 mg/l IC50 algae (72 h) mg/l
2,6-Di-tert-butyl-p-cresol (128-37-0)	
LC50 - Fish [1]	> 0.57 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	0.48 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 0.4 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.023 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	0.053 mg/l Test organisms (species): Oryzias latipes Duration: '42 d'

12.2. Persistence and degradability

SHELL BRAKE & CLUTCH FLUID DOT4	
Biodegradation	76 %

12.3. Bioaccumulative potential

SHELL BRAKE & CLUTCH FLUID DOT4	
Partition coefficient n-octanol/water (Log Pow)	-1.75 TRIETHYLENE GLYCOL
Partition coefficient n-octanol/water (Log Kow)	0.51 Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol

12.4. Mobility in soil

SHELL BRAKE & CLUTCH FLUID DOT4	
Mobility in soil	1

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations. Waste Management Regulation published in the Official Journal numbered 29314 on April 2, 2015.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Completely empty the packaging prior to decontamination. Comply with applicable regulations for solid waste disposal.
Additional information	: Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number

UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: Not applicable
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IMDG

Transport hazard class(es) (IMDG)	: Not applicable
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IATA

Transport hazard class(es) (IATA)	: Not applicable
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ADN

Transport hazard class(es) (ADN)	: Not applicable
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RID

Transport hazard class(es) (RID)	: Not applicable
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14.4. Packing group

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

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14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(b)	SHELL BRAKE & CLUTCH FLUID DOT4 ; tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] borate ; Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol ; 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether
3(c)	2,6-Di-tert-butyl-p-cresol
54.	2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

Regulation on Health and Safety Precautions When Working with Chemical Substances published in the Official Journal numbered 28733 on August 12, 2013

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms	
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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor

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Abbreviations and acronyms	
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative
CAS-No.	Chemical Abstract Service number
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS	Chemical Abstracts Service (division of the American Chemical Society)
EC-No.	European Community number
EN	European Standard
IOELV	Indicative Occupational Exposure Limit Value
N.O.S.	Not Otherwise Specified
OEL	Occupational Exposure Limit
Pow (log)	n-octanol/water partition coefficient
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
ThOD	Theoretical oxygen demand (ThOD)
TRGS	Technical Rules for Hazardous Substances
VOC	Volatile Organic Compounds
WGK	Water Hazard Class
COD	Chemical oxygen demand (COD)

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Safety Data Sheet

according to Regulation (EU) 2015/830

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. ECHA (European Chemicals Agency). Supplier's safety documents.

Full text of H- and EUH-statements	
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 2	Reproductive toxicity, Category 2
Repr. 2	Reproductive toxicity, Category 2
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.