



Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 15.06.2023

Version number 13 (replaces version 12)

Revision: 15.06.2023

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

· **1.1 Product identifier**

· **Trade name:** TRW DOT 3 Brake Fluid

· **Article number:**

PFB350, PFB325, PFB301, PFB305, PFB301AP, PFB325ROM, PFB325GER, PFB325RUS, PFB325BUL,
PFB325ENG, PFB325FRA, PFB325POL, PFB325POR, PFB350CE, PFB350SE, PFB350RE, PFB301CE,
PFB301SE, PFB301RE, PFB305CE, PFB305SE, PFB305RE, PFB325AP, PFB350AP

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

No further relevant information available.

· **Application of the substance / the mixture** Brake fluid

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

ZF Aftermarket UK Ltd.
Abbeyfield Road
Lenton
Nottingham, NG7 2SX
Tel +44 333 240 1123
Fax +44 115 986 92 61
<https://www.zf.com>

· **Informing department:**

Phone: +49 (0) 7541 77 0

E-Mail adress of the competent person for the safety data sheet:
reach@dekra.com

· **1.4 Emergency telephone number:**

Poison Information Center Munich
Phone: +49 (0) 89 - 19 240
Information in German and English

* **SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



Eye Irrit. 2 H319 Causes serious eye irritation.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

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· **Hazard pictograms**



GHS07 GHS08

· **Signal word** Warning

· **Hazard-determining components of labelling:**

2-[2-(2-butoxyethoxy)ethoxy]ethanol
Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

· **Hazard statements**

H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.

· **Precautionary statements**

P102 Keep out of reach of children.
P280 Wear protective gloves / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

Packaging of whatever capacity that is delivered to the general public shall be fitted with a tactile warning of danger according to EN ISO 11683.

· **Information pertaining to particular dangers for man and environment**

There are analysis results available for this product or a product with a comparable composition which show an eye irritation but not an eye corrosion. This product is classified and labelled according to the analysis results.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.
· **vPvB:** Not applicable.


* **SECTION 3: Composition/information on ingredients**

· **3.2 Mixtures**

· **Description:**

Mixture of the substances listed below including additives not requiring identification.
Added are corrosion and oxidation inhibitors.

· **Dangerous components:**

<p>CAS: 143-22-6 EINECS: 205-592-6 Reg.nr.: 01-2119475107-38-X</p>	<p>2-[2-(2-butoxyethoxy)ethoxy]ethanol  Eye Dam. 1, H318 Specific concentration limits: Eye Dam. 1; H318: C ≥ 30 % Eye Irrit. 2; H319: 20 % ≤ C < 30 %</p>	<p>≥ 30 - ≤ 50%</p>
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CAS: 30989-05-0 EINECS: 250-418-4 Reg.nr.: 01-2119462824-33-X	Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate ⚠ Repr. 2, H361	10 - 25%
CAS: 111-46-6 EINECS: 203-872-2 Reg.nr.: 01-2119457857-21-X	2,2'-oxybisethanol ⚠ Acute Tox. 4, H302	10 - 25%
CAS: 1559-34-8 EINECS: 216-322-1 Reg.nr.: 01-2120768763-41-X	3,6,9,12-tetraoxahexadecan-1-ol ⚠ Eye Irrit. 2, H319	10%
CAS: 112-34-5 EINECS: 203-961-6 Reg.nr.: 01-2119475104-44-X	2-(2-butoxyethoxy)ethanol ⚠ Eye Irrit. 2, H319	≥ 0 - < 10%
CAS: 111-77-3 EINECS: 203-906-6 Reg.nr.: 01-2119475100-52-X	Dowanol DM ⚠ Repr. 2, H361d Specific concentration limit: Repr. 1B; H360D: C ≥ 3 %	≤ 1%

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information

Personal protection for the First Aider.

Instantly remove any clothing contaminated by the product.

· **After inhalation** Supply fresh air; consult doctor in case of symptoms.

· After skin contact

Wash with water and soap.

If skin irritation continues, consult a doctor.

· After eye contact

Keep eye lids open and rinse them with ample amounts of clean running water for at least 15 minutes.

In case of permanent aches and pains please go and see the doctor.

· After swallowing

Rinse out mouth and then drink plenty of water.

Call a doctor immediately.

Make victim drink ethanol (e.g. 1 drinking glass of a 40% alcoholic beverage).

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

No further relevant information available.

· **Danger** Danger of kidney damage.

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

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· Suitable extinguishing agents

Extinguishing powder, foam or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· **For safety reasons unsuitable extinguishing agents** Water with a full water jet.

· 5.2 Special hazards arising from the substance or mixture

Inhalation of combustion gases may cause serious health hazards.

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Formation of flammable mixtures of vapours with air possible.

- **5.3 Advice for firefighters**
 - **Protective equipment:** Wear self-contained breathing apparatus.
 - **Additional information**
Remove goods in stock from incendiary zone, if possible.
Use water to keep fire exposed containers cool.
-

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid contact with the product.
Ensure adequate ventilation
Particular danger of slipping on leaked/spilled product.
 - **6.2 Environmental precautions:**
Prevent from spreading (e.g. by damming-in or oil barriers).
Do not allow to enter drainage system, surface or ground water.
 - **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Dispose of contaminated material as waste according to section 13.
Complete cleaning with water.
 - **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.
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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep containers tightly sealed.
Avoid contact with eyes and skin.
Prevent formation of aerosols.
 - **Information about protection against explosions and fires:**
The product forms flammable fumes when heated.
 - **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage**
 - **Requirements to be met by storerooms and containers:** Store only in the original container.
 - **Information about storage in one common storage facility:** Store away from oxidising agents.
 - **Further information about storage conditions:**
Store container in a well ventilated position.
Store under dry conditions.
Keep container tightly sealed.
 - **7.3 Specific end use(s)** Brake fluid
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* **SECTION 8: Exposure controls/personal protection**

- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
WEL: workplace exposure limit
OEL: Occupational Exposure Limit

111-46-6 2,2'-oxybisethanol		
WEL (Great Britain)	Long-term value: 101 mg/m ³ , 23 ppm	
OEL (Ireland)	Long-term value: 100 mg/m ³ , 23 ppm	
112-34-5 2-(2-butoxyethoxy)ethanol		
WEL (Great Britain)	Short-term value: 101.2 mg/m ³ , 15 ppm Long-term value: 67.5 mg/m ³ , 10 ppm	
IOELV (European Union)	Short-term value: 101.2 mg/m ³ , 15 ppm Long-term value: 67.5 mg/m ³ , 10 ppm	
OEL (Ireland)	Short-term value: 101.2 mg/m ³ , 15 ppm Long-term value: 67.5 mg/m ³ , 10 ppm IOELV	
111-77-3 Dowanol DM		
WEL (Great Britain)	Long-term value: 50.1 mg/m ³ , 10 ppm Sk	
IOELV (European Union)	Long-term value: 50.1 mg/m ³ , 10 ppm Skin	
OEL (Ireland)	Long-term value: 50.1 mg/m ³ , 10 ppm Sk, IOELV	
· DNELs		
143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol		
Oral	DNEL (consumer, long-term, systemic)	12.5 mg/kg bw/day (human)
30989-05-0 Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate		
Oral	DNEL (consumer, long-term, systemic)	1.5 mg/kg bw/day (human)
Dermal	DNEL (worker, long-term, systemic)	4.2 mg/kg bw/day (human)
	DNEL (consumer, long-term, systemic)	1.5 mg/kg bw/day (human)
Inhalative	DNEL (worker, long-term, systemic)	14.8 mg/m ³ (human)
	DNEL (consumer, long-term, systemic)	2.6 mg/m ³ (human)
111-46-6 2,2'-oxybisethanol		
Dermal	DNEL (worker, long-term, systemic)	43 mg/kg bw/day (human)
	DNEL (consumer, long-term, systemic)	21 mg/kg bw/day (human)
Inhalative	DNEL (worker, long-term, systemic)	44 mg/m ³ (human)
	DNEL (consumer, long-term, systemic)	12 mg/m ³ (human)
	DNEL (worker, short-term, local)	60 mg/m ³ (human)
	DNEL (consumer, long-term, local)	12 mg/m ³ (human)
1559-34-8 3,6,9,12-tetraoxahexadecan-1-ol		
Oral	DNEL (consumer, long-term, systemic)	3 mg/kg bw/day (human)

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112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	DNEL (consumer, long-term, systemic)	6.25 mg/kg bw/day (human)
Inhalative	DNEL (worker, short-term, local)	101.2 mg/m ³ (human)
	DNEL (worker, long-term, local)	67.5 mg/m ³ (human)
111-77-3 Dowanol DM		
Oral	DNEL (consumer, long-term, systemic)	7.5 mg/kg bw/day (human)
Dermal	DNEL (worker, long-term, systemic)	2.22 mg/kg bw/day (human)
	DNEL (consumer, short-term, systemic)	1.33 mg/kg bw/day (human)
Inhalative	DNEL (worker, long-term, systemic)	50.1 mg/m ³ (human)
	DNEL (consumer, long-term, systemic)	30.1 mg/m ³ (human)
· PNECs		
143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol		
PNEC aqua (freshwater)		2 mg/L (.)
PNEC aqua (marine water)		0.2 mg/L (.)
PNEC STP - Sewage Treatment Plant		200 mg/L (.)
PNEC soil		0.47 mg/kg soil dw (.)
PNEC sediment (freshwater)		7.7 mg/kg sedim. dw (.)
PNEC sediment (marine water)		0.77 mg/kg sedim. dw (.)
PNEC oral		111 mg/kg food (.)
1559-34-8 3,6,9,12-tetraoxahexadecan-1-ol		
PNEC aqua (freshwater)		2.5 mg/L (.)
PNEC aqua (marine water)		0.25 mg/L (.)
PNEC soil		0.46 mg/kg soil dw (.)
PNEC sediment (freshwater)		9.49 mg/kg sedim. dw (.)
PNEC sediment (marine water)		0.95 mg/kg sedim. dw (.)
112-34-5 2-(2-butoxyethoxy)ethanol		
PNEC aqua (freshwater)		1.1 mg/L (.)
PNEC aqua (marine water)		0.11 mg/L (.)
PNEC soil		0.32 mg/kg soil dw (.)
PNEC sediment (freshwater)		4.4 mg/kg sedim. dw (.)
PNEC sediment (marine water)		0.44 mg/kg sedim. dw (.)
PNEC aqua (intermittent releases)		11 mg/L (.)
PNEC oral		56 mg/kg food (.)
111-77-3 Dowanol DM		
PNEC aqua (freshwater)		12 mg/L (.)
PNEC aqua (marine water)		1.2 mg/L (.)
PNEC STP - Sewage Treatment Plant		10,000 mg/L (.)
PNEC soil		2.1 mg/kg soil dw (.)
PNEC sediment (freshwater)		44.4 mg/kg sedim. dw (.)
PNEC sediment (marine water)		0.44 mg/kg sedim. dw (.)
PNEC aqua (intermittent releases)		12 mg/L (.)

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PNEC oral	90 mg/kg food (.)
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· **Additional information:** The lists that were valid during the compilation were used as basis.

· **8.2 Exposure controls**

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

· **General protective and hygienic measures**

Take off all contaminated clothing immediately.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes.

Do not eat or drink while working.

· **Breathing equipment:**

Not necessary if room is well-ventilated.

Use breathing protection only when aerosol or mist is formed.

Filter A/P2.

· **Hand protection**

Use gloves of stable material (i.e. nitril rubber).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Butyl rubber, BR

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection**



Tightly sealed safety glasses.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Fluid

· **Colour:**

Amber coloured

· **Odour:**

Mild

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

< -50 °C (SAE J 1703)

· **Boiling point or initial boiling point and boiling range**

> 260 °C (SAE J 1703)

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<ul style="list-style-type: none">· Flammability· Lower and upper explosion limit· Lower:· Upper:· Flash point:· Auto-ignition temperature:· Decomposition temperature:· SADT· pH at 20 °C· Viscosity:· Kinematic viscosity· dynamic at 20 °C:· Solubility· Water:· Partition coefficient n-octanol/water (log value)· Vapour pressure:· Density and/or relative density· Density at 20 °C· Relative density· Vapour density	<p>Not applicable.</p> <p>Not determined.</p> <p>Not determined.</p> <p>> 100 °C (IP 35)</p> <p>> 300 °C (ATSM D 286)</p> <p>Thermally in general stable.</p> <p>7 (SAE J 1703)</p> <p>Not determined.</p> <p>10 mPas (ASTM D 286)</p> <p>Partly soluble</p> <p>1.5 log POW</p> <p>Not determined.</p> <p>1.01 - 1.06 g/cm³ (DIN 51757)</p> <p>Not determined.</p> <p>Not determined.</p>
<ul style="list-style-type: none">· 9.2 Other information· Appearance:· Form:· Important information on protection of health and environment, and on safety.· Self-inflammability:· Explosive properties:· Change in condition· Evaporation rate	<p>Fluid</p> <p>Product is not selfigniting.</p> <p>Product is not explosive.</p> <p>Not determined.</p>
<ul style="list-style-type: none">· Information with regard to physical hazard classes· Explosives· Flammable gases· Aerosols· Oxidising gases· Gases under pressure· Flammable liquids· Flammable solids· Self-reactive substances and mixtures· Pyrophoric liquids· Pyrophoric solids· Self-heating substances and mixtures· Substances and mixtures, which emit flammable gases in contact with water· Oxidising liquids· Oxidising solids· Organic peroxides· Corrosive to metals	<p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p> <p>Void</p>

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· Desensitised explosives	Void
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SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Possible formation of peroxide
Reacts with light alloys to form hydrogen
- **10.4 Conditions to avoid** Brake fluids should never be contaminated with any other substance.
- **10.5 Incompatible materials:** Avoid contact with strong oxidizing agents.
- **10.6 Hazardous decomposition products:**
None in case of intended use and storage in compliance with instructions.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol

Oral LD50 5,170 mg/kg (rat)

Dermal LD50 3,540 mg/kg (rabbit)

30989-05-0 Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

Oral LD50 > 2,000 mg/kg (rat) (OECD 401)

Dermal LD50 > 2,000 mg/kg (rat) (OECD 402)

111-46-6 2,2'-oxybisethanol

Oral LD50 16,500 mg/kg (rat)

Dermal LD50 13,300 mg/kg (rabbit)

1559-34-8 3,6,9,12-tetraoxahexadecan-1-ol

Oral LD50 2,630 mg/kg (rat)

Dermal LD50 3,540 mg/kg (rabbit)

112-34-5 2-(2-butoxyethoxy)ethanol

Oral LD50 5,660 mg/kg (rat)

Dermal LD50 2,764 mg/kg (rabbit) (OECD 402)

Inhalative LC0 67.5 mg/l/0.5h (human)

111-77-3 Dowanol DM

Oral LD50 7,128 mg/kg (mouse) (OECD 201)

Dermal LD50 9,404 mg/kg (rabbit) (OECD 402)

Inhalative LC0 > 1.2 mg/l/6h (rat) (OECD 403)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Causes serious eye irritation.

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- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Suspected of damaging fertility or the unborn child.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **Repeated dose toxicity**
Repeated oral intake can cause kidney damage.

143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol		
Oral	NOAEL (90d)	500 mg/kg bw/day (rat)
112-34-5 2-(2-butoxyethoxy)ethanol		
Oral	NOAEL (90d)	250 mg/kg bw/day (rat) (OECD 408)
Dermal	NOAEL (90d)	2,000 mg/kg bw/day (rat) (OECD 411)
Inhalative	NOAEC (90d)	94 mg/m ³ (rat) (OECD 413) Vapour
111-77-3 Dowanol DM		
Oral	NOAEL (28d)	900 mg/kg bw/day (rat) (OECD 407)
Dermal	NOAEL (90d)	40 mg/kg bw/day (guinea pig) (OECD 411)
Inhalative	NOAEC (90d)	> 1,060 mg/m ³ (rat) (OECD 413)

- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
Repr. 2
- **11.2 Information on other hazards**

· Endocrine disrupting properties
None of the ingredients is listed.

* SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:	
143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol	
EC50 (static)	2,210 mg/l/48h (Daphnia magna) (EU C.2)
EC0 (static)	2,150 mg/l/96h (fish) (DIN 38 412-L15)
LC50	2,400 mg/l/96h (Pimephales promelas)
	2,200 - 4,600 mg/l/96h (fish) (DIN 38412-15)
EC50 (static)	840 mg/l/72h (Desmodesmus subspicatus) (OECD 201)
NOEC (static)	1,000 mg/l/96h (fish) (DIN 38 412-L15)
30989-05-0 Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate	
EC50	> 211.2 mg/l/48h (Daphnia magna) (OECD 202)
LC50	> 222.2 mg/l/96h (Oncorhynchus mykiss) (OECD 203)
EC50	> 224.4 mg/l/72h (Raphidocelis subcapitata) (OECD 201)

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111-46-6 2,2'-oxybisethanol	
EC50	62,630 mg/l/48h (Daphnia magna)
LC50 (dynamic)	75,222 mg/l/96h (Pimephales promelas)
1559-34-8 3,6,9,12-tetraoxahexadecan-1-ol	
EC50	> 3,200 mg/l/48h (Daphnia magna) (OECD 202)
LC50	> 1,800 mg/l/96h (Scophthalmus maximus) (OECD 203)
112-34-5 2-(2-butoxyethoxy)ethanol	
EC50 (static)	> 100 mg/l/48h (Daphnia magna) (OECD 202)
EC50 (static)	> 100 mg/l/96h (Desmodesmus subspicatus) (OECD 201)
LC50 (static)	1,300 mg/l/96h (Lepomis macrochirus) (OECD 203)
111-77-3 Dowanol DM	
EC50 (static)	1,192 mg/l/48h (Daphnia magna)
EC50 (static)	> 1,000 mg/l/96h (Selenastrum capricornutum) (OECD 201)
LC50 (static)	5,741 mg/l/96h (Pimephales promelas)

- **12.2 Persistence and degradability** Easily biodegradable
- **Other information:** There are no data available about the preparation.
- **12.3 Bioaccumulative potential**
Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
The waste code numbers mentioned are recommendations based on the probable use of the product.

• European waste catalogue	
16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 01 00	end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
16 01 13*	brake fluids
HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

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Safety data sheet
according to 1907/2006/EC, Article 31

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HP10	Toxic for reproduction
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- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.
Dispose of packaging according to regulations on the disposal of packagings.
Non contaminated packagings can be used for recycling.
Cleaned packing materials have to be admitted to local recycling circuits.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

· 14.1 UN number or ID number · ADR/RID, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR/RID, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR/RID, ADN, IMDG, IATA · Class	Void
· 14.4 Packing group · ADR/RID, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Chemical safety assessment**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EU) 2019/1148**

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS
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None of the ingredients is listed.

- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.
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SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

- H302 Harmful if swallowed.
- 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.

- **Department issuing data specification sheet:**

- ▶ **DEKRA** This Safety Data Sheet has been drawn up in cooperation with:
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- **Abbreviations and acronyms:**

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- DNEL: Derived No-Effect Level (UK REACH)
- PNEC: Predicted No-Effect Concentration (UK REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Acute Tox. 4: Acute toxicity – Category 4
- 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

- * **Data compared to the previous version altered.**
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