Brake Fluid DOT3

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 22/05/2015 Revision date: 05/10/2018 Supersedes version of: 16/12/2015 Version: 3.3

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

1.1. Product identifier

Product form : Mixture
Name : Brake Fluid DOT3
UFI : WNVR-84FY-400K-55K4
Product code : 534
Article number : 53400

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Professional use.
Function or use category : Brake fluids

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

BARDAHL NL - OCD NEDERLAND BV
Maxwellstraat 41
3316 GP Dordrecht
Nederland
T 0031 78 651 2322 - F 0031 78 617 4848
mjkooijman@bardahl.nl - www.bardahl.nl

1.4. Emergency telephone number

Emergency number : +31 (0) 6 54924171
During office hours: 8.30 t/m 17:00 h

Country	Official advisory body	Address	Emergency number	Comment
	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4 H302
Specific target organ toxicity – Repeated exposure, Category 2 H373
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07 GHS08

Signal word (CLP) : Warning

Contains : 2,2' -oxybisethanol; diethylene glycol; 1,2-ethanediol

Hazard statements (CLP) : H302 - Harmful if swallowed.
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (CLP) : P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves, protective clothing, face protection, eye protection.
P103 - Read label before use.
P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 - Dispose of contents/container in accordance with local regulations.

2.3. Other hazards

PBT: not relevant – no registration required
vPvB: not relevant – no registration required
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
1,2-ethanediol (107-21-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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]
2,2' -oxybisethanol; diethylene glycol	CAS-No.: 111-46-6 EC-No.: 203-872-2 EC Index-No.: 603-140-00-6 REACH-no: 01-2119457857-21	25 – 50	Acute Tox. 4 (Oral), H302
2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutylether; butoxytriethylene glycol	CAS-No.: 143-22-6 EC-No.: 205-592-6 EC Index-No.: 603-183-00-0 REACH-no: 01-2119475107-38	30 – 50	Eye Dam. 1, H318

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2-ethanediol	CAS-No.: 107-21-1 EC-No.: 203-473-3 EC Index-No.: 603-027-00-1 REACH-no: 01-2119456816-28	≤ 10	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether	CAS-No.: 111-77-3 EC-No.: 203-906-6 EC Index-No.: 603-107-00-6 REACH-no: 01-2119475100-52	2.5 – 3	Repr. 2, H361d STOT RE 2, H373
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	CAS-No.: 112-34-5 EC-No.: 203-961-6 EC Index-No.: 603-096-00-8 REACH-no: 01-2119457857-21	< 1	Eye Irrit. 2, H319
2-aminoethanol; ethanolamine	CAS-No.: 141-43-5 EC-No.: 205-483-3 EC Index-No.: 603-030-00-8 REACH-no: 01-2119486455-28	< 1	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutylether; butoxytriethylene glycol	CAS-No.: 143-22-6 EC-No.: 205-592-6 EC Index-No.: 603-183-00-0 REACH-no: 01-2119475107-38	(20 ≤ C < 30) Eye Irrit. 2, H319 (30 ≤ C ≤ 100) Eye Dam. 1, H318
2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether	CAS-No.: 111-77-3 EC-No.: 203-906-6 EC Index-No.: 603-107-00-6 REACH-no: 01-2119475100-52	(3 ≤ C ≤ 100) Repr. 1B, H360D
2-aminoethanol; ethanolamine	CAS-No.: 141-43-5 EC-No.: 205-483-3 EC Index-No.: 603-030-00-8 REACH-no: 01-2119486455-28	(5 ≤ C ≤ 100) STOT SE 3, H335

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 : Take off immediately all contaminated clothing. In any case of doubt or if symptoms can be observed, get medical attention.

First-aid measures after inhalation : Allow affected person to breathe fresh air. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately. Drink plenty of water.

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. Call a POISON CENTER/doctor.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Powder. Alcohol resistant foam. Water haze.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Carbon monoxide. Nitrogen oxides.

5.3. Advice for firefighters

Protection during firefighting : Use self-contained breathing apparatus. Wear suitable protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Wear proper protective equipment. See Heading 8.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel).

6.4. Reference to other sections

See Headings 7 and 8. See Heading 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, cool, well-ventilated area. Keep container tightly closed. Hygroscopic product. Keep away from combustible materials.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

1,2-ethanediol (107-21-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Ethylene glycol
IOEL TWA	52 mg/m³
IOEL TWA [ppm]	20 ppm
IOEL STEL	104 mg/m³
IOEL STEL [ppm]	40 ppm
Remark	Skin

2-aminoethanol; ethanolamine (141-43-5)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	7.5 mg/m³
IOEL TWA [ppm]	3 ppm
IOEL STEL	15 mg/m³
IOEL STEL [ppm]	6 ppm

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

2,2' -oxybisethanol; diethylene glycol (111-46-6)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	106 mg/kg bodyweight/day
Long-term - local effects, inhalation	60 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, dermal	53 mg/kg bodyweight/day
Long-term - local effects, inhalation	12 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	10 mg/l
PNEC aqua (marine water)	1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	20.9 mg/kg dwt
PNEC sediment (marine water)	2.09 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.53 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	199.5 mg/l

1,2-ethanediol (107-21-1)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	106 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	35 mg/m³
Long-term - local effects, inhalation	35 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	7 mg/m³
Long-term - systemic effects, dermal	53 mg/kg bodyweight/day
Long-term - local effects, inhalation	7 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	10 mg/l
PNEC aqua (marine water)	1 mg/l
PNEC aqua (intermittent, freshwater)	10 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	20.9 mg/kg dwt
PNEC (Soil)	
PNEC soil	1.53 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	199.5 mg/l

2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.53 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	50.1 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	1.5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	25 mg/m³
Long-term - systemic effects, dermal	0.27 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	12 mg/l
PNEC aqua (marine water)	1.2 mg/l
PNEC aqua (intermittent, freshwater)	12 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	44.4 mg/kg dwt
PNEC sediment (marine water)	0.44 mg/kg dwt
PNEC (Soil)	
PNEC soil	2.44 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	0.09 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	10000 mg/l

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	101.2 mg/m³
Long-term - systemic effects, dermal	20 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	67.5 mg/m³
Long-term - local effects, inhalation	67.5 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	50.6 mg/m³
Long-term - systemic effects,oral	1.25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	10 mg/m³
Long-term - local effects, inhalation	34 mg/m³
PNEC (Water)	
PNEC aqua (marine water)	3.9 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC aqua (intermittent, marine water)	0.1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	4 mg/kg dwt
PNEC sediment (marine water)	0.4 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.4 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	56 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	200 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:
Protective goggles.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Use eye protection according to EN 166, designed to protect against liquid splashes.

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing. EN ISO 13688

Hand protection:
Wear suitable gloves tested to EN374. Gloves material: Nitrile. neoprene/butyl rubber. Penetration time of glove material: ≥ 480 min. Wear suitable gloves resistant to chemical penetration. Selection of the glove material on consideration of the penetration times, premeatiegraden and degradation. Refer to manufacturer's information.

Other skin protection

Materials for protective clothing:
Wear suitable protective clothing. EN 340

8.2.2.3. Respiratory protection

Respiratory protection:
Not required

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:
The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, drink and animal feedingstuffs. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Remove contaminated clothing immediately. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	light yellow. Transparent.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	-50 °C
Freezing point	:	Not available
Boiling point	:	> 235 °C
Flammability	:	Not available
Explosive properties	:	Product is not explosive.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	> 111 °C (Closed cup)
Auto-ignition temperature	:	304 °C
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	11 – 14 mm²/s (SAE J 1703, SAE J 1704)
Solubility	:	Soluble in water. Organic solvent:0.0%
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	< 0 hPa (20°C)
Vapour pressure at 50°C	:	Not available
Density	:	1.039 g/cm³
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Additional information	:	Material is hygroscopic

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Hygroscopic product. No decomposition if used according to specifications.

10.3. Possibility of hazardous reactions

May form peroxides.

10.4. Conditions to avoid

Heat. Sparks. Open flame. Strong oxidizers.

10.5. Incompatible materials

Strong acids. Bases. Strong oxidizers. Water.

10.6. Hazardous decomposition products

At high temperature may liberate dangerous gases.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified
Additional information : The product is not subject to classification. According to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version. When used and handled according to specifications, the product on the basis of our experience and the information provided to us will not cause adverse health effects.

Brake Fluid DOT3	
ATE CLP (oral)	833.333 mg/kg bodyweight

2,2' -oxybisethanol; diethylene glycol (111-46-6)	
LD50 oral rat	> 10000 mg/kg
LD50 dermal rabbit	> 10000 mg/kg
LC50 Inhalation - Rat	> 4.6 mg/l/4h

1,2-ethanediol (107-21-1)	
LD50 oral rat	7712 mg/kg
LD50 dermal rabbit	9530 mg/kg
LC50 Inhalation - Rat	> 2.5 mg/l

2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)	
LD50 oral rat	> 5000 mg/kg (OECD 401)
LD50 dermal rabbit	> 6500 mg/kg (OECD 402)
LC50 Inhalation - Rat	1.2 mg/l/4h (OECDD 403)

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5)	
LD50 oral rat	5660 mg/kg
LD50 dermal rabbit	4000 mg/kg

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5)	
LC50 Inhalation - Rat	> 29 mg/l/4h

2-aminoethanol; ethanolamine (141-43-5)	
LD50 oral rat	2050 mg/kg
LD50 dermal rabbit	1000 mg/kg

Skin corrosion/irritation : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Causes serious eye damage.

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

2,2' -oxybisethanol; diethylene glycol (111-46-6)	
NOAEL (chronic, oral, animal/male, 2 years)	100 mg/kg bodyweight (Rat)

1,2-ethanediol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1000 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	1000 mg/kg bodyweight

Reproductive toxicity : Based on available data, the classification criteria are not met

STOT-single exposure : Based on available data, the classification criteria are not met

1,2-ethanediol (107-21-1)	
NOAEL (oral, rat)	200 mg/kg bodyweight
NOAEL (acute, oral, animal/female)	1000 mg/kg bodyweight

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

1,2-ethanediol (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)	
NOAEL (oral, rat, 90 days)	900 mg/kg bodyweight/day
NOAEL (dermal, rat/rabbit, 90 days)	40 mg/kg bodyweight/day
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Based on available data, the classification criteria are not met

Brake Fluid DOT3	
Viscosity, kinematic	11 – 14 mm²/s (SAE J 1703, SAE J 1704)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : No specific risk for the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

Brake Fluid DOT3	
LC50 - Other aquatic organisms [1]	250 – 350 mg/l (Leuciscus Idus) (DIN 38412 T.15; analogy) 96h

Brake Fluid DOT3	
EC50 - Other aquatic organisms [1]	> 5000 mg/l (Bacteriën) (OECD 2091; analogy)

2,2' -oxybisethanol; diethylene glycol (111-46-6)	
LC50 - Fish [1]	75200 mg/l (Pimephales promelas)
EC50 - Crustacea [1]	> 10000 mg/l (DIN 38412/11) 24h

1,2-ethanediol (107-21-1)	
LC50 - Fish [1]	72860 mg/l
EC50 - Crustacea [1]	> 100 mg/l (24h)
EC50 - Other aquatic organisms [1]	6500 – 13000 mg/l (Algen)
NOEC chronic fish	15380 mg/l
NOEC chronic algae	8590 mg/l

2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether (111-77-3)	
LC50 - Fish [1]	5741 mg/l (Pimephales promelas) (US-EPA)
EC50 - Crustacea [1]	1192 mg/l (EPA-660/3-75-009 (1975))
EC50 - Other aquatic organisms [1]	> 1000 mg/l (OECD 209)
EC50 - Other aquatic organisms [2]	> 1000 mg/l (Selenastrum Capricornutum) (OECD 201)

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5)	
LC50 - Other aquatic organisms [1]	1300 mg/l
EC50 - Crustacea [1]	100 mg/l (EU Method C.2)
EC50 96h - Algae [1]	≥ 100 mg/l

12.2. Persistence and degradability

Brake Fluid DOT3	
Biodegradation	76 % (28d)

1,2-ethanediol (107-21-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	90 % (OECD 301D method)

12.3. Bioaccumulative potential

1,2-ethanediol (107-21-1)	
Partition coefficient n-octanol/water (Log Kow)	-1.36
Bioaccumulative potential	Low.

12.4. Mobility in soil

Brake Fluid DOT3	
Ecology - soil	Prevent entry to sewers and public waters.

1,2-ethanediol (107-21-1)	
Ecology - soil	High. Mobility in soil.

12.5. Results of PBT and vPvB assessment

Brake Fluid DOT3
PBT: not relevant – no registration required
vPvB: not relevant – no registration required

Component	
1,2-ethanediol (107-21-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport
No data available

Transport by sea
No data available

Air transport
No data available

Inland waterway transport
No data available

Rail transport
No data available

14.7. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	**Applicable on**
3.	Brake Fluid DOT3 ; 2,2' -oxybisethanol; diethylene glycol ; 2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutylether; butoxytriethylene glycol ; 1,2-ethanediol ; 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether ; 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether ; 2-aminoethanol; ethanolamine
28.	Brake Fluid DOT3
29.	Brake Fluid DOT3
3(b)	Brake Fluid DOT3 ; 2,2' -oxybisethanol; diethylene glycol ; 2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutylether; butoxytriethylene glycol ; 1,2-ethanediol ; 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether ; 2-aminoethanol; ethanolamine
30.	Brake Fluid DOT3
54.	2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether
55.	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No

SECTION 16: Other information

Indication of changes

Section	Changed item	Change	Comments
	Aspiration hazard - comment	Added	
	STOT-single exposure - comment	Added	
	Reproductive toxicity - comment	Added	
	Carcinogenicity - comment	Modified	
	Germ cell mutagenicity - comment	Added	
	Respiratory or skin sensitisation - comment	Modified	
	Serious eye damage/irritation - comment	Modified	
	Skin corrosion/irritation - comment	Added	
1.2	Industrial/Professional use spec	Added	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	Precautionary statements (CLP)	Modified	
2.2	Signal word (CLP)	Modified	
2.2	Hazard statements (CLP)	Modified	
2.2	Hazard pictograms (CLP)	Modified	
3	Composition/information on ingredients	Modified	
8.2	Skin and body protection	Modified	
8.2	Hand protection	Modified	
11.1	ATE CLP (oral)	Modified	
15.1	REACH Annex XVII	Added	

Abbreviations and acronyms:

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RID: Regulations Concerning the International Transport of Dangerous Goods by Rail
ICAO: International Civil Aviation Organization
ADR: 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 Harmonized 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)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

Full text of H- and EUH-statements:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360D	May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), EU

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.