according to 29 CFR 1910.1200(g)

Textar Brake Fluid DOT 4LV

Revision date: 03/01/2024

1. Identification

Product identifier

Textar Brake Fluid DOT 4LV

Product code:

95006110, 95006210, 95006310

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Hydraulic (functional) fluids PC-TEC-8: Hydraulic fluids, including brake and transmission fluids

Details of the supplier of the safety data sheet

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Company name:	TMD Friction Services GmbH	
Street:	Schlebuscher Str. 99	
Place:	D-51381 Leverkusen	
Telephone:	+49 (2171)703-0	
E-mail:	serviceline@tmdfriction.com	
Contact person:	Hr. Beier	Telephone:+49 (2171)9113-7373
E-mail:	serviceline@tmdfriction.com	
Internet:	www.tmdfriction.com	
Emergency phone number:	GIZ Bonn: +49 (0)228-19240 (24/7)	

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Serious eye damage/eye irritation: Eye Irrit. 2A Reproductive toxicity: Repr. 2

Label elements

29 CFR Part 1910.1200

Signal word:

Pictograms:



Hazard statements

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

Precautionary statements

If medical advice is needed, have product container or label at hand. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Wash hands thoroughly after handling. Wear protective gloves and eye/face protection. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. Store locked up. Dispose of waste according to applicable legislation.



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Hazards not otherwise classified

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. This material is combustible, but will not ignite readily.

3. Composition/information on ingredients

<u>Mixtures</u>

Relevant ingredients

CAS No	Components	Quantity
30989-05-0	Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate	80 - 95 %
143-22-6	2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutylether; butoxytriethylene glycol	10 - 15 %
1559-34-8	3,6,9,12-tetraoxahexadecan-1-ol	1 - 3 %
111-77-3	2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether	< 1 %

Further Information

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps.

After inhalation

Provide fresh air. Call a doctor if you feel unwell.

After contact with skin

Wash with plenty of water. Immediately remove any contaminated clothing, shoes or stockings. In case of skin reactions, consult a physician.

Clean with detergents. Avoid solvent cleaners.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Rinse mouth immediately and drink plenty of water. Observe risk of aspiration if vomiting occurs. Do NOT induce vomiting. Immediately call a doctor.

Following ingestion large scale (Manufacturer): Immediately call a doctor. Alcohol (40 %) 90 - 120 mL (2 mg/kg bw)

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Water mist, alcohol resistant foam, Dry extinguishing powder, Carbon dioxide (CO2). Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet



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Specific hazards arising from the chemical

This material is combustible, but will not ignite readily.

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO2), Pyrolysis products, toxic.

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit

Additional information

Supress gases/vapors/mists with water spray jet. Use water spray/stream to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fume/vapor/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

For non-emergency personnel

Use personal protection equipment.

For emergency responders

Wear personal protection equipment (refer to section 8).

Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Methods and material for containment and cleaning up

For containment

Stop leak if safe to do so. Cover drains.

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean with detergents. Avoid solvent cleaners.

Other information

Clean contaminated articles and floor according to the environmental legislation.

Reference to other sections

Safe handling: see section 7 Personal protection equipment (PPE): see section 8 Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe gas/vapor/spray. Wear personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Conditions for safe storage, including any incompatibilities



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Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Hints on joint storage

Do not store together with: Acid, alkali (Base), Oxidising agent, Reducing agent.

Further information on storage conditions

- Keep away from heat.
- storage temperature: 15 30 °C

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No	Substance	ppm	mg/m³	f/cc	Category	Origin
112-34-5	Diethylene glycol monobutyl ether (inhalable fraction and vapor)	10			TWA (8 h)	ACGIH-2023

Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. Eye glasses with side protection

Hand protection

Wear suitable gloves.

penetration time (maximum wearing period): > 480 min.

Suitable material: Butyl caoutchouc (butyl rubber)

Thickness of glove material: 0,3 mm

Suitable material: NBR (Nitrile rubber)

Thickness of glove material: 0,2 mm

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Thermal hazards

No information available.

Environmental exposure controls

Do not allow to enter into surface water or drains.

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9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid
Color:	amber
Odor:	characteristic
Odour threshold:	not determined
Melting point/freezing point:	< -50 °C
Boiling point or initial boiling point and boiling range:	> 260 °C
Flammability:	This material is combustible, but will not ignite readily.
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	> 120 °C
Auto-ignition temperature:	> 280 °C
Decomposition temperature:	300 °C
pH-Value:	7 - 10,5
Viscosity / kinematic: (at 20 °C)	5 - 10 mm²/s
Water solubility:	easily soluble
Solubility in other solvents not determined	
Partition coefficient n-octanol/water:	1,5
Vapor pressure: (at 20 °C)	1,0 hPa
Density:	1,02 - 1,07 g/cm³
Relative vapour density:	not determined
Particle characteristics:	not applicable
Other information	
Other safety characteristics	
Evaporation rate:	(n-Butyl acetate=100) 0,01
Further Information	
No information available.	

10. Stability and reactivity

Reactivity

No hazardous reaction when handled and stored according to provisions.

Chemical stability

Stability:

Stable

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

Hazardous reactions:

Will not occur

No hazardous reaction when handled and stored according to provisions.

Conditions to avoid

Keep away from heat.

Incompatible materials

Acid, alkali (Base), Oxidising agent, Reducing agent.



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Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO2), Pyrolysis products, toxic.

11. Toxicological information

Route(s) of Entry

oral, Skin contact, Eye contact, Inhalation.

Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Absorption large scale (Manufacturer): May cause damage to organs. (kidneys)

ATEmix tested

	Dose	Species	Source
LD50, oral	> 5000 mg/kg	Rat	Manufacturer
LD50, dermal	> 3000 mg/kg	Rabbit	Manufacturer

ATEmix calculated

ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Irritation and corrosivity

Causes serious eye irritation

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

Sensitizing effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging fertility or the unborn child (Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate) Germ cell mutagenicity: Based on available data, the classification criteria are not met. Carcinogenicity: Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity (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.

Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

Absorption large scale (Manufacturer)

The following symptoms may occur: Depression of central nervous system, Gastrointestinal complaints, Headache, Nausea.

12. Ecological information

Ecotoxicity

The product is not: Ecotoxic.

Persistence and degradability

Product is biodegradable. (OECD 302B)

Bioaccumulative potential

Based on the n-octanol/water partition coefficient accumulation in organisms is not expected. (<= 2)

<u>Mobility in soi</u>l

Soluble in: Water. If product enters soil, it will be mobile and may contaminate groundwater.



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Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Other adverse effects

No information available.

Further information

Avoid release to the environment.

13. Disposal considerations

Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

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Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

14. Transport information

U.S. DOT 49 CFR 172.101

Proper shipping name: Marine transport (IMDG)

> <u>UN number or ID number:</u> <u>UN proper shipping name:</u> <u>Transport hazard class(es):</u> <u>Packing group:</u>

Air transport (ICAO-TI/IATA-DGR) <u>UN number or ID number:</u> <u>UN proper shipping name:</u>

Transport hazard class(es): Packing group:

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

No information available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

15. Regulatory information

U.S. Regulations

National Inventory TSCA

All ingredients of the mixture are public/active listed or exempted. Observe in addition any national regulations!

National regulatory information

SARA Section 311/312 Hazards:

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutylether; butoxytriethylene glycol (143-22-6): Immediate (acute) health hazard

3,6,9,12-tetraoxahexadecan-1-ol (1559-34-8): Immediate (acute) health hazard

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5): Immediate (acute) health hazard

State Regulations



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Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California) This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Observe in addition any national regulations!

16. Other information

Hazardous Materials Identific	ation System (HMIS)
Health:	*2
Flammability:	0
Physical Hazard:	0
NFPA Hazard Ratings	
Health:	0
Flammability:	0
Reactivity:	0
Unique Hazard:	
Changes	
Revision date:	03/01/2024
Revision No:	1,1
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BRAKE TECHNOLOGY

Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists CFR: Code of Federal Regulations DOT: Department of Transportation ICAO: International Civil Aviation Organization IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IARC: International Agency for Research on Cancer GHS: Globally Harmonized System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service NFPA: National Fire Protection Association NTP: National Toxicology Program OSHA: Occupational Safety and Health Administration PEL: permissible exposure limit **REL:** recommended exposure limit SARA: Superfund Amendments and Reauthorization Act STEL: Short-term exposure limit TSCA: Toxic Substances Control Act TWA: time-weighted average TI: Technical Instructions DGR: Dangerous Goods Regulations UN: United Nations ATE: Acute toxicity estimate LC50: Lethal concentration, 50% LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50% EC50: Effective Concentration 50% ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration BCF: Bio-concentration factor MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container VOC: Volatile Organic Compounds

Other data

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)