

# Safety Data Sheet

according to GSO ISO 11014:2013

## Textar Brake Fluid DOT 5.1

Revision date: 08.11.2021

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

#### 1.1. Product identifier

Textar Brake Fluid DOT 5.1

#### Product code:

95006600

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

##### Use of the substance/mixture

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

#### 1.3. Details of the supplier of the safety data sheet

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	

#### 1.4. Emergency telephone number:

GIZ Bonn: +49 (0)228-19240 (24/7)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### UN-GHS (ST/SG/AC.10/30/Rev.5)

Hazard categories:  
Reproductive toxicity: Repr. 2  
Hazard Statements:  
Suspected of damaging the unborn child.

#### 2.2. Label elements

##### UN-GHS (ST/SG/AC.10/30/Rev.5)

##### Hazard components for labelling

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

Signal word: Warning

##### Pictograms:



##### Hazard statements

Suspected of damaging 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.  
Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
IF exposed or concerned: Get medical advice/attention.  
Store locked up.

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Dispose of waste according to applicable legislation.

### 2.3. Other hazards

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.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
30989-05-0	Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate			80 - < 85 %
	250-418-4		01-2119462824-33	
	Repr. 2; H361			
143-22-6	2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutylether; butoxytriethylene glycol			5 - < 10 %
	205-592-6	603-183-00-0	01-2119475107-38	
	Eye Dam. 1; H318			
9004-77-7	Polyethylene glycol butyl ether			1 - < 5 %
	500-012-0			
	Eye Irrit. 2; H319			
111-77-3	2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether			1 - < 5 %
	203-906-6	603-107-00-6	01-2119475100-52	
	Repr. 2; H361			

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

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity	
	Specific Conc. Limits, M-factors and ATE			
143-22-6	205-592-6	2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutylether; butoxytriethylene glycol	5 - < 10 %	
	Eye Dam. 1; H318: >= 30 - 100 Eye Irrit. 2; H319: >= 20 - < 30			
9004-77-7	500-012-0	Polyethylene glycol butyl ether	1 - < 5 %	
	Eye Irrit. 2; H319: >= 20 - 100			

## SECTION 4: First aid measures

### 4.1. 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. Medical treatment necessary.

#### After contact with skin

Wash with plenty of water. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary.

Clean with detergents. Avoid solvent cleaners.

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### **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.

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

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

No 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**

Water mist, alcohol resistant foam, Dry extinguishing powder, Carbon dioxide (CO<sub>2</sub>).  
Co-ordinate fire-fighting measures to the fire surroundings.

#### **Unsuitable extinguishing media**

Full water jet

### **5.2. Special hazards arising from the substance or mixture**

This material is combustible, but will not ignite readily.

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Pyrolysis products, toxic.

### **5.3. Advice for firefighters**

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

### **Additional information**

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

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

#### **General advice**

Provide adequate ventilation. Do not breathe gas/vapour/aerosol. Evacuate area. Remove persons to safety.  
Special danger of slipping by leaking/spilling product.

#### **For non-emergency personnel**

Use personal protection equipment.

#### **For emergency responders**

Use personal protection equipment.

### **6.2. 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.

### **6.3. Methods and material for containment and cleaning up**

#### **For containment**

No information available.

#### **For cleaning up**

Absorb with liquid-binding material (e.g. 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.

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### Other information

Clean contaminated articles and floor according to the environmental legislation.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe gas/vapour/aerosol. 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. Avoid contact with skin, eyes and clothes. Do not breathe gas/vapour/aerosol.

### 7.2. Conditions for safe storage, including any incompatibilities

#### 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 exhaust at critical locations.

#### Hints on joint storage

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

#### Further information on storage conditions

storage temperature: 18 - 23 °C

### 7.3. Specific end use(s)

Hydraulic (functional) fluids

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

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls



#### Appropriate engineering controls

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

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear eye protection/face protection. Eye glasses with side protection (DIN EN 166)

##### Hand protection

Wear suitable gloves tested to EN374.

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)

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Thickness of glove material: 0,2 mm

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. 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

not applicable

### Environmental exposure controls

Do not allow to enter into surface water or drains.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	amber
Odour:	characteristic
Odour threshold:	not applicable

### Changes in the physical state

Melting point/freezing point:	< -50 °C
Boiling point or initial boiling point and boiling range:	> 260 °C
Flash point:	> 120 °C

### Flammability

Solid/liquid:	> 280 °C
Gas:	not applicable

### Explosive properties

The product is not: Explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined

### Self-ignition temperature

Solid:	not determined
Gas:	not applicable

Decomposition temperature:	300 °C
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### Oxidizing properties

The product is not: oxidising.

pH-Value:	7 - 10,5
Viscosity / dynamic:	not determined
Viscosity / kinematic: (at 20 °C)	5 - 10 mm <sup>2</sup> /s
Water solubility:	miscible

### Solubility in other solvents

not determined

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Partition coefficient n-octanol/water:	1,50
Vapour pressure: (at 20 °C)	1,00 hPa
Density:	1,02 - 1,07 g/cm <sup>3</sup>
Relative vapour density:	not determined

### 9.2. Other information

#### Other safety characteristics

Evaporation rate: (n-butyl acetate=100) 0,01

#### Further Information

Wet boiling point: < 165 °C

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

### 10.4. Conditions to avoid

Keep away from heat.

### 10.5. Incompatible materials

Acid, Strong alkali, Oxidizing agents, strong. Reducing agent, strong

### 10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Pyrolysis products, toxic.

## SECTION 11: Toxicological information

### 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

#### Irritation and corrosivity

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

#### Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging the unborn child.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

#### 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.

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### Aspiration hazard

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

### Information on likely routes of exposure

Inhalation, Skin contact, Eye contact, oral

### 11.2. Information on other hazards

#### Other information

Absorption large scale (Manufacturer)

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

## SECTION 12: Ecological information

### 12.1. Toxicity

The product is not: Ecotoxic.

### 12.2. Persistence and degradability

Product is biodegradable. (OECD 302B)

### 12.3. Bioaccumulative potential

Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

### 12.4. Mobility in soil

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

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Endocrine disrupting properties

No information available.

### 12.7. Other adverse effects

No information available.

### Further information

Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

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

#### Contaminated packaging

Dispose of waste according to applicable legislation.

## SECTION 14: Transport information

### UN Recommendations on the Transport of Dangerous Goods - Model Regulations

**14.1. UN number:** No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.

**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### Marine transport (IMDG)

**14.1. UN number:** No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.

**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### Air transport (ICAO-TI/IATA-DGR)

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- 14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

### 14.6. Special precautions for user

No information 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

National regulatory information

## SECTION 16: Other information

### Abbreviations and acronyms

CLP: Classification, labelling and Packaging  
REACH: Registration, Evaluation and Authorization of Chemicals  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
UN: United Nations  
CAS: Chemical Abstracts Service  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
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  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative  
ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Regulations concerning the international carriage of dangerous goods by rail  
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)  
IMDG: International Maritime Code for Dangerous Goods  
EmS: Emergency Schedules  
MFAG: Medical First Aid Guide  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
IBC: Intermediate Bulk Container  
VOC: Volatile Organic Compounds  
SVHC: Substance of Very High Concern



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For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

### Relevant H and EUH statements (number and full text)

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

### Further Information

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.

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