

# Safety Data Sheet

according to GSO ISO 11014:2013

**TEXTAR**  
BRAKE TECHNOLOGY

## Textar Brake fluid DOT4LV

Revision date: 29.07.2021

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

#### 1.1. Product identifier

Textar Brake fluid DOT4LV

#### Product code:

95006000  
95006100  
95006200  
95006300

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

##### Use of the substance/mixture

Hydraulic (functional) 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 fertility or 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

2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether

Signal word: Warning

##### Pictograms:



##### Hazard statements

H361 Suspected of damaging fertility or the unborn child.

##### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P203 Obtain, read and follow all safety instructions before use.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P318 IF exposed or concerned, get medical advice.  
P405 Store locked up.  
P501 Dispose of waste according to applicable legislation.

### 2.3. Other hazards

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			50 - < 55 %
	250-418-4			
	Repr. 2; H361			
143-22-6	2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutylether; butoxytriethylene glycol			1 - < 5 %
	205-592-6	603-183-00-0		
	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		
	Repr. 2; H361			

#### Further Information

Specific concentration limit (SCL):  
CAS No. 143-22-6:  
Serious eye damage, Category 1 H318:  $\geq 30\%$   
Eye irritation, Category 2 H319:  $20 - < 30\%$

CAS No. 9004-77-7  
Eye irritation, Category 2 H319:  $\geq 20\%$

## 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. 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.

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### 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 measures

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

#### 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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

#### For cleaning up

Clean with detergents. Avoid solvent cleaners.

#### Other information

Treat the recovered material as prescribed in the section on waste disposal.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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### 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.

#### 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 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**

storage temperature: 18 - 23 °C

#### 7.3. Specific end use(s)

Hydraulic (functional) 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 exhaustion at critical locations.

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

##### **Eye/face protection**

Wear eye protection/face protection. Eye glasses with side protection

##### **Hand protection**

Tested protective gloves must be worn  
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

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.

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### 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.

## 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 determined

#### 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 applicable
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

Partition coefficient n-octanol/water:	1,5
Vapour pressure: (at 20 °C)	1,0 hPa
Density:	1,02 - 1,07 g/cm <sup>3</sup>
Relative vapour density:	not determined

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### 9.2. Other information

#### Other safety characteristics

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

#### Further Information

No information available.

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

### 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.

Acute toxicity: no classification. May cause damage to kidneys through prolonged or repeated exposure in contact with skin. May cause damage to kidneys through prolonged or repeated exposure if swallowed.

#### 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 fertility or the unborn child. (Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate; 2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether)

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.

#### Aspiration hazard

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

#### Information on likely routes of exposure

oral, dermal, inhalative.

#### Practical experience

Acute toxicity: no classification.

Practical experience/human evidence: Absorption large scale (Manufacturer): May cause damage to organs. (kidneys)

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depression of central nervous system, Gastrointestinal complaints, Headache, Vomiting.

### 11.2. Information on other hazards

#### **Endocrine disrupting properties**

No information available.

#### **Other information**

No information available.

## 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. ( $\leq 2$ )

### 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.

#### **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**

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

## 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)**

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.

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#### 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

##### Additional information

Observe in addition any national regulations!

### SECTION 16: Other information

#### Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienist  
ATE: Acute toxicity estimate  
BCF: Bio-concentration factor  
CAS: Chemical Abstracts Service  
DGR: Dangerous Goods Regulations  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
EC50: Effective Concentration 50%  
EL50: Effect loading, 50%  
ErC50: Effective Concentration 50%, growth rate  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative  
IATA: International Air Transport Association  
IBC: Intermediate Bulk Container  
ICAO: International Civil Aviation Organization  
IMDG: International Maritime Code for Dangerous Goods  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
LL50: Lethal loading, 50%  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
NOEC: No Observed Effect Concentration  
OEL: Occupational Exposure Limit  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit  
STEL: Short-Term Exposure Limit  
TWA: Time weighted average  
UN: United Nations

#### 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.

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