Safety Data Sheet
according SS 586 : Part 3

Printing date 24.11.2025 Version number 12.0 Revision: 01.11.2025

*
1 Identification

Product identifier

Trade name: Original ATE Brake Fluid SL (DOT 4)

Article number: 03.9901-58xx.x / 7058xx
Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
Application of the substance / the mixture hydraulic liquid

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
AUMOVIO Aftermarket GmbH
Guerickestr. 7
60488 Frankfurt a. M.
Germany
Tel: +49-69-76031
Importer:
Name:
Address:

Phone:
e-Mail:

Further information obtainable from:
Hazardous Substances Management Aftermarket, Central Materials Laboratory
ate.sicherheit@aumovio.com
Emergency telephone number:
INFOTRAC
+1-352-323-3500 (International)
+65 3163 5349 (National)

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2 Hazards identification

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

Label elements
GHS label elements
The product is classified and labelled according to the Globally Harmonised System (GHS).
Hazard pictograms

GHS08

Signal word Warning

Hazard-determining components of labelling:
Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate
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.
P103 Read label before use.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

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P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

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3 Composition/information on ingredients

Chemical characterisation: Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
30989-05-0	Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate Repr. 2, H361	≥30-<50%
	Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol Eye Dam. 1, H318 Specific concentration limits: Eye Dam. 1; H318: C ≥ 30 % Eye Irrit. 2; H319: 20 % ≤ C < 30 %	≥10-<15%
143-22-6	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 %	≥5-<10%
111-46-6	2,2'-oxybisethanol Acute Tox. 4, H302	≥5-<10%
1559-34-8	3,6,9,12-Tetraoxahexadecan-1-ol Serious eye damage/irritation – Category 2A, H319	≥2-<5%
110-97-4	1,1'-Iminodipropan-2-ol Serious eye damage/irritation – Category 2A, H319	≥1-<2%

Additional information:
CAS 143-22-6 and 1559-34-8 are part of the Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1ol, for which the SCL applies.
For the wording of the listed hazard phrases refer to section 16.

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4 First-aid measures

Description of first aid measures
General information:
Take affected persons out of danger area.
Do not leave affected persons unattended.
Remove/Take off immediately all contaminated clothing.
After inhalation:
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Seek medical treatment.
After skin contact:
If skin irritation occurs: Get medical advice/attention.
Immediately wash with water and soap and rinse thoroughly.

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After eye contact:
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.
Protect unharmed eye.
After swallowing:
Do NOT induce vomiting.
Rinse mouth thoroughly with water.
Call a doctor immediately.
Most important symptoms and effects, both acute and delayed
No further relevant information available.
Indication of any immediate medical attention and special treatment needed
No further relevant information available.

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5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
For safety reasons unsuitable extinguishing agents: Water with full jet
Special hazards arising from the substance or mixture
In case of fire, the following can be released:
Carbon monoxide (CO)
Nitrogen oxides (NOx)
Boron oxides
During heating or in case of fire poisonous gases are produced.
Advice for firefighters
Protective equipment:
Do not inhale explosion gases or combustion gases.
Wear self-contained respiratory protective device.
Additional information
Collect contaminated fire fighting water separately. It must not enter the sewage system.

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6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources.
Environmental precautions:
Do not allow product to reach sewage system or any water course.
Do not allow to penetrate the ground/soil.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Dispose of the material collected according to regulations.
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 disposal information.

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7 Handling and storage

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
Information about fire - and explosion protection:
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Temperature class: T3

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: Storage at room temperature.
Information about storage in one common storage facility:
Store away from foodstuffs.
Store away from flammable substances.
Further information about storage conditions:
This product is hygroscopic.
Store in dry conditions.
Keep container tightly sealed.
Specific end use(s) No further relevant information available.

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8 Exposure controls/personal protection

Control parameters
Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Exposure controls
Additional information about design of technical facilities: No further data; see section 7.
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Pregnant women should strictly avoid inhalation or skin contact.
Use skin protection cream for skin protection.
Respiratory protection:
In the case of vapour formation use a respirator with an approved filter.
Equipment should conform to EN 14387.
If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time.
filter ABEK-P2
Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
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.
Penetration time of glove material
Butyl caoutchouc (butyl rubber): minimum breakthrough time 480 min; minimum layer thickness: 0.7 mm
NBR (nitrile rubber): minimum breakthrough time 30 min; minimum layer thickness: 0.4 mm
Eye protection: Safety glasses
Body protection: Protective work clothing

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Limitation and supervision of exposure into the environment
See section 6 and 7. No additional measures necessary.

9 Physical and chemical properties

Information on basic physical and chemical properties
General Information

Colour:	Yellow
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value at 20 °C:	8.5 (50%) (FMVSS 116)
Melting point/freezing point:	<-70 °C (DIN 51583)
Initial boiling point and boiling range:	>260 °C (FMVSS 116)
Flash point:	139 °C (ASTM D 7094 (closed cup))
Evaporation rate	Not determined.
Flammability	Not applicable.
Explosion limits:	
Lower:	1.5 Vol %
Upper:	Not determined.
Vapour pressure at 20 °C:	<1 hPa
Vapour pressure:	
Vapour density	Not determined.
Density at 20 °C:	1.06 g/cm³ (DIN 51757)
Relative density	Not determined.
water:	Fully miscible.
Partition coefficient: n-octanol/water:	Not determined.
Auto-ignition temperature:	>200 °C (DIN 51794)
Decomposition temperature:	ca. 360 °C (DSC)
Viscosity:	
Kinematic at 20 °C:	15-17 mm²/s (FMVSS 116)
Dynamic:	Not determined.
Other information	No further relevant information available.
Appearance:	
Form:	Fluid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.

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10 Stability and reactivity

Reactivity No further relevant information available.
Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
Possibility of hazardous reactions No dangerous reactions known.
Conditions to avoid No further relevant information available.
Incompatible materials: No further relevant information available.
Hazardous decomposition products:
Carbon monoxide and carbon dioxide

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Nitrogen oxides (NOx)
Boron oxides
Hydrocarbons

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11 Toxicological information

Information on toxicological effects
Acute toxicity

LD/LC50 values relevant for classification:		
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)
Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>3,000 mg/kg (rabbit)
143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
111-46-6 2,2'-oxybisethanol		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
1559-34-8 3,6,9,12-Tetraoxahexadecan-1-ol		
Oral	LD50	>2,000 mg/kg (rat) (OECD 401)
110-97-4 1,1'-Iminodipropan-2-ol		
Oral	LD50	>2,000 mg/kg (rat) (OECD 401)
Dermal	LD50	>5,000 mg/kg (rabbit)

Primary irritant effect:
Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation Based on available data, the classification criteria are not met.
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.

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12 Ecological information

Toxicity

Aquatic toxicity:	
EC50	6.25 mg/l (bacteria) 250-350 mg/l (fish) (DIN 38412 96 h)

30989-05-0 Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate	
EC50	>100 mg/l (algae) (72 h) >100 mg/l (daphnia) (48 h)

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LC50	>100 mg/L (fish) (96 h)
Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol	
EC50	>100 mg/l (algae)
LC50	>100 mg/L (daphnia)
	>100 mg/L (fish) (DIN 38412 96 h)
143-22-6 2-[2-(2-butoxyethoxy)ethoxy]ethanol	
EC50	>100 mg/l (algae)
LC50	>100 mg/L (daphnia)
	>100 mg/L (fish)
111-46-6 2,2'-oxybisethanol	
EC50	>100 mg/l (algae)
	>100 mg/l (daphnia) (DIN 38412 T.11)
LC50	>100 mg/L (fish) (96 h)
1559-34-8 3,6,9,12-Tetraoxahexadecan-1-ol	
EC50	>100 mg/l (algae) (OECD 201 72 h)
	>100 mg/l (daphnia) (OECD 202 48 h)
110-97-4 1,1'-Iminodipropan-2-ol	
EC50 (static)	>100 mg/l (algae) (72 h)
	>100 mg/l (daphnia) (92/69/EWG 48 h)
LC50 (static)	>100 mg/L (fish) (OECD 203 96 h)

Persistence and degradability No further relevant information available.
Other information: The product is easily biodegradable.
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Other adverse effects
Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow product to reach ground water, water course or sewage system.

13 Disposal considerations

Waste treatment methods
Disposal should be based on the relevant state and local laws and regulations, the disposal process should avoid pollution of the environment.
Recommendation
After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

Uncleaned packaging:
Recommendation:
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

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14 Transport information

UN-Number **ADR, IMDG, IATA**	Void
UN proper shipping name **ADR, IMDG, IATA**	Void
Transport hazard class(es) **ADR, ADN, IMDG, IATA** **Class**	Void
Packing group **ADR, IMDG, IATA**	Void
Environmental hazards:	Not applicable.
Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
Special precautions for user	Not applicable.
UN "Model Regulation":	Void

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Poisons Act - Schedule 1
None of the ingredients are listed.

Poisons Act - Schedule 2, Group II
None of the ingredients are listed.

Health Products Act - First Schedule - Psychotropic Substances
None of the ingredients are listed.

National regulations:

Information about limitation of use:
Employment restrictions concerning pregnant and lactating women must be observed.
Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
It is the sole responsibility of the importer or distributor to identify and comply with all legal requirements necessary for the lawful placing of chemical products on the market in the respective target countries.

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.
Recommended restriction of use For industrial or professional purposes only.

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Department issuing SDS:
Hazardous Substances Management Aftermarket
ate.sicherheit@aumovio.com

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
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)
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
Serious eye damage/irritation – Category 2A: Serious eye damage/eye irritation – Category 2A
Repr. 2: Reproductive toxicity – Category 2

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