Safety Data Sheet
according to P.U.(A) 310/2013

Printing date 05.05.2023 Version number 11 Revision: 01.04.2023

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1 Identification of the hazardous chemical and of the supplier

Product identifier

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

Article number: 03.9901-58xx.x / 7058xx
Recommended use of the chemical and restrictions on use
No further relevant information available.
Application of the substance / the mixture hydraulic liquid

Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Continental Aftermarket & Services GmbH
Sodener Straße 9
D-65824 Schwalbach am Taunus
Tel: +49-6196-87-0

Further information obtainable from:
Gefahrstoffmanagement Konzern, Zentrales Materiallabor
ate.sicherheit@contiautomotive.com
Emergency telephone number: +49-6132-84463 (24 h) 190 languages spoken

2 Hazard identification

Classification of the substance or mixture


health hazard

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
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
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.

3 Composition and information of the ingredients of the hazardous chemical

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

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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-<20%
111-46-6	2,2'-oxybisethanol Acute Tox. 4, H302	<10%
110-97-4	1,1'-iminodipropan-2-ol Eye Irrit. 2, H319	<2%

Additional information: 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:
Remove contaminated clothes and shoes immediately.
Get medical advice/attention if you feel unwell.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing: Call a doctor immediately.
Information for doctor:
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.

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
May be released in case of fire: CO, CO2, NOx
Advice for firefighters
Protective equipment:
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Additional information
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Environmental precautions:
Do not allow product to reach sewage system or any water course.

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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

Handling:
Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
Information about fire - and explosion protection: No special measures required.

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.
Storage class according to TRGS 510: 10 combustible liquids.
Specific end use(s) No further relevant information available.

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8 Exposure controls and personal protection

Additional information about design of technical facilities: No further data; see section 7.

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
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.
Use skin protection cream for skin protection.
Respiratory protection:
Respiratory protection required in case of release of vapors / aerosols.
If occupational exposure limits are exceeded, use breathing mask (filter type A). Wear self-contained breathing apparatus in case of danger of oxygen displacement.
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

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NBR (nitrile rubber): minimum breakthrough time 30 min; minimum layer thickness: 0.4 mm
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Safety glasses
Body protection: Protective work clothing
Limitation and supervision of exposure into the environment
See section 6 and 7. No additional measures necessary.

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9 Physical and chemical properties

Information on basic physical and chemical properties	
General Information	
Appearance:	
Form:	Fluid
Colour:	Yellow
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value at 20 °C:	8.5 (50%) (FMVSS 116)
Change in condition	
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))
Flammability (solid, gas)	Not applicable.
Auto-ignition temperature	>200 °C (DIN 51794)
Decomposition temperature:	ca. 360 °C (DSC)
Auto-ignition temperature	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	1.5 Vol %
Upper:	Not determined.
Vapour pressure at 20 °C:	<1 hPa
Density at 20 °C:	1.06 g/cm³ (DIN 51757)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
water:	Fully miscible.
Partition coefficient: n-octanol/water	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C:	15-17 mm²/s (FMVSS 116)
Other information	No further relevant information available.

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.

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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
Nitrogen oxides (NOx)

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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)
111-46-6 2,2'-oxybisethanol		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
110-97-4 1,1'-iminodipropan-2-ol		
Oral	LD50	>2,000 mg/kg (rat) (OECD 401)
Dermal	LD50	8,000 mg/kg (rabbit)
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)

Primary irritant effect:
Skin corrosion or irritation Based on available data, the classification criteria are not met.
Serious eye damage or eye irritation
Based on available data, the classification criteria are not met.
Respiratory / skin sensitization Based on available data, the classification criteria are not met.
Additional toxicological information:
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Suspected of damaging fertility or the unborn child.
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.

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)
LC50	>100 mg/L (fish) (96 h)

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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)
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)
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)

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

13 Disposal information

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.

14 Transportation information

UN-Number	
ADR, IMDG, IATA	Void
UN proper shipping name	
ADR, IMDG, IATA	Void
Transport hazard class(es)	
ADR, IMDG, IATA	
Class	Void
Packing group	
ADR, IMDG, IATA	Void

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Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
UN "Model Regulation":	Void

15 Regulatory information

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

EHS reference list	
111-46-6	2,2'-oxybisethanol
110-97-4	1,1'-iminodipropan-2-ol

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.

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.

Recommended restriction of use For industrial or professional purposes only.

Department issuing SDS:
Gefahrstoffmanagement Konzern
ate.sicherheit@contiautomotive.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 - oral – Category 4
Eye Dam. 1: Serious eye damage or eye irritation – Category 1
Eye Irrit. 2: Serious eye damage or eye irritation – Category 2
Repr. 2: Reproductive toxicity – Category 2
Sources
http://echa.europa.eu/information-on-chemicals/cl-inventory
http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances
http://www.reach-clp-biozid-helpdesk.de/de/Downloads/CLP-VO/CLP_VO_Anhang_VI_Tabelle_3_2.pdf
http://www.safeworkaustralia.gov.au/
*** Data compared to the previous version altered.**