



Safety Data Sheet

according to P.U.(A) 310/2013

Printing date 11.08.2023

Version number 3

Revision: 01.07.2023

1 Identification of the hazardous chemical and of the supplier

Product identifier

Trade name: Original ATE Brake Fluid SUPER DOT 5.1

Article number: 03.9901-66xx.x/7066xx

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:

Malaysia National Poison Centre, USM

National Poison Centre Universiti Sains Malaysia 11800 Penang Malaysia

Tel: +604-657 0099

Emergency number:

Office Hours: +604-657 0099 (Monday-Friday: 8.10am-5.10pm)

After Office Hours: +6012-430 9499 (including weekends and public holidays)

Fax: +604-656 8417

Email: prnnet@usm.my

+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.

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Trade name: Original ATE Brake Fluid SUPER DOT 5.1

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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.

Dangerous components:

30989-05-0	Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate Repr. 2, H361	<70%
	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 %	<15%
110-97-4	1,1'-iminodipropyl-2-ol Eye Irrit. 2, H319	<2%
111-46-6	2,2'-oxybisethanol Acute Tox. 4, H302	<2%
111-77-3	2-(2-methoxyethoxy)ethanol Repr. 1B, H360 Specific concentration limit: Repr. 1B; H360: C ≥ 3 %	<0.3%

Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

Description of first aid measures

General information: Remove contaminated clothes and shoes immediately.

After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

Supply fresh air or oxygen; call for doctor.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing:

Rinse out mouth and then drink plenty of water.

Seek medical treatment.

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:

Water spray

Fire-extinguishing powder

Foam

Use fire extinguishing methods suitable to surrounding conditions.

Special hazards arising from the substance or mixture

May be released in case of fire: CO, CO₂, NO_x

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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 to enter sewers/surface or ground water.

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.

7 Handling and storage

Handling:

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.

Information about fire - and explosion protection: Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store cool and dry.

Storage at room temperature.

Information about storage in one common storage facility:

Store away from water.

Store away from foodstuffs.

Further information about storage conditions:

Recommended storage temperature: 10°C - 35°C.

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.

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.

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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.
Use particulate filter with medium retention capacity for solid and liquid particles (eg EN 143 or 149, type P2 or FFP2).

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

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.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	Amber coloured
Odour:	Product specific
Odour threshold:	Not determined.

pH-value at 20 °C: 7.7 (50 %(m))

Change in condition

Melting point/freezing point	Undetermined.
Initial boiling point and boiling range	271 °C (ASTM D1120)

Flash point: 137.5 °C (ISO 2719)

Flammability (solid, gas) Not applicable.

Auto-ignition temperature 222 °C (DIN EN ISO/IEC 80079-20-1)

Decomposition temperature: Not determined.

Auto-ignition temperature Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure at 20 °C: 1 hPa

Vapour pressure at 50 °C: 1 hPa

Density at 20 °C: 1.06 g/cm³ (DIN 51757)

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Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
water:	Fully miscible.

Partition coefficient: n-octanol/water	Not determined.
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Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C:	11.5 mm ² /s (ASTM D445)
Kinematic at 40 °C:	6.8 mm ² /s (ASTM D445)

Other information	No further relevant information available.
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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 and stored according to specifications.

No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid Avoid heat, sparks, open flames and other ignition sources.

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NO_x)

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)
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Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)
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Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol

Oral	LD50	>5,000 mg/kg (rat)
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Dermal	LD50	>3,000 mg/kg (rabbit)
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110-97-4 1,1'-iminodipropan-2-ol

Oral	LD50	>2,000 mg/kg (rat) (OECD 401)
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Dermal	LD50	8,000 mg/kg (rabbit)
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111-46-6 2,2'-oxybisethanol

Oral	LD50	>5,000 mg/kg (rat)
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Dermal	LD50	>5,000 mg/kg (rabbit)
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111-77-3 2-(2-methoxyethoxy)ethanol

Oral	LD50	4,160 mg/kg (Guinea Pig) (OECD 401)
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Dermal	LD50	>5,000 mg/kg (rabbit) (OECD 402)
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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.

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Additional toxicological information:**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)****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.**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:**

LC50	>100 mg/L (fish)
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30989-05-0 Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

EC50	>100 mg/l (Algae) (72 h)
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	>100 mg/l (daphnia) (48 h)
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LC50	>100 mg/L (fish) (96 h)
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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)
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	>100 mg/L (fish) (DIN 38412 96 h)
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110-97-4 1,1'-iminodipropan-2-ol

EC50 (static)	>100 mg/l (Algae) (72 h)
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	>100 mg/l (daphnia) (92/69/EWG 48 h)
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LC50 (static)	>100 mg/L (fish) (OECD 203 96 h)
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111-46-6 2,2'-oxybisethanol

EC50	>100 mg/l (Algae)
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	>100 mg/l (daphnia) (DIN 38412 T.11)
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LC50	>100 mg/L (fish) (96 h)
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111-77-3 2-(2-methoxyethoxy)ethanol

EC50 (static)	>100 mg/l (Algae) (OECD 201 96 h)
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	>100 mg/l (daphnia) (EPA 48 h)
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LC50 (static)	>100 mg/L (fish) (EPA 96 h)
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Persistence and degradability The single components are easily eliminable from water.**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.

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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

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

110-97-4 | 1,1'-iminodipropan-2-ol

111-46-6 | 2,2'-oxybisethanol

111-77-3 | 2-(2-methoxyethoxy)ethanol

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.

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Trade name: Original ATE Brake Fluid SUPER DOT 5.1*(Contd. of page 7)***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. 1B: Reproductive toxicity – Category 1B

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.**

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