

Lembar Data Keselamatan
 menurut Peraturan Menteri Perindustrian RI No. 87/M-IND/
 PER/9/2009

Printing date 24.07.2020

Version number 1

Revision: 01.05.2020

1 Identifikasi Senyawa (Tunggal atau Campuran)

Product identifier

Trade name: Original ATE Brake Fluid SUPER DOT 5.1

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

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:

Continental Aftermarket & Services GmbH
 Sodener Straße 9
 D-65824 Schwalbach am Taunus
 Germany
 Tel: +49-69-7603-11
 Fax: +49-69-761061

Further information obtainable from:

Gefahrstoffmanagement Konzern, Zentrales Materiallabor
 ate.sicherheit@contiautomotive.com

Emergency telephone number: +49-6132-84463 (24 h) 190 languages spoken

2 Identifikasi Bahaya

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

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

vPvB: Not applicable.

3 Komposisi /Informasi tentang Bahan Penyusun Senyawa Tunggal

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	<70%
	Repr. 2, H361	
	Reaction mass of 2-(2-(2-butoxyethoxy)ethoxy)ethanol and 3,6,9,12-tetraoxahexadecan-1-ol	<15%
	Eye Dam. 1, H318	
	Specific concentration limits: Eye Dam. 1; H318: C ≥ 30 % Eye Irrit. 2; H319: 20 % ≤ C < 30 %	
110-97-4	1,1'-iminodipropan-2-ol	<2%
	Eye Irrit. 2, H319	
111-46-6	2,2'-oxybisethanol	<2%
	Acute Tox. 4, H302	
111-77-3	2-(2-methoxyethoxy)ethanol	<0.5%
	Repr. 2, H361	

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

4 Tindakan Pertolongan Pertama pada Kecelakaan

Description of first aid measures
General information: Remove contaminated clothes and shoes immediately.

After inhalation:

Supply fresh air or oxygen; call for doctor.

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

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.

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5 Tindakan pemadaman kebakaran

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.

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 Tindakan Penanggulangan jika terjadi Tumpahan dan Kebocoran

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.

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 Penanganan dan Penyimpanan

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.

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Keep container tightly sealed.

Storage class according to TRGS 510: 10 combustible liquids.

Specific end use(s) No further relevant information available.

8 Kontrol Paparan/ Perlindungan Diri

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

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 Sifat fisika dan kimia

Information on basic physical and chemical properties

General Information

Appearance:

Form: Fluid

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Colour:	Amber coloured
Odour:	Product specific
Odour threshold:	Not determined.
pH-value at 20 °C:	7.7
Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	271 °C
Flash point:	137.5 °C
Flammability (solid, gas):	Not applicable.
Ignition temperature:	230 °C
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
Density at 20 °C:	1.06 g/cm ³
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:	11.5 mm ² /s
Solvent content:	
Organic solvents:	2.1-<2.5 %
Solids content:	17.2-<97 %
Other information	No further relevant information available.

10 Stabilitas dan Reaktivitas

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.

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Conditions to avoid No further relevant information available.

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

11 Informasi Toksikologi

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)

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

Oral LD50 >2,000 mg/kg (rat) (OECD 401)

Dermal LD50 8,000 mg/kg (rabbit)

111-46-6 2,2'-oxybisethanol

Oral LD50 >5,000 mg/kg (rat)

Dermal LD50 >5,000 mg/kg (rabbit)

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

Oral LD50 >5,000 mg/kg (mouse) (OECD 401)

Dermal LD50 >5,000 mg/kg (rabbit) (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)

Primary irritant effect:
Skin corrosion/irritation No irritant effect.

Serious eye damage/irritation No irritating effect.

Respiratory or skin sensitisation No sensitising effects known.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Repr. 2

Reproductive toxicity

Some evidence of adverse effects on development, based on animal experiments.

12 Informasi Ekologi

Toxicity

Aquatic toxicity:

LC50 >100 mg/L (fish)

30989-05-0 Tris[2-[2-(2-methoxyethoxy)ethoxy]ethyl] orthoborate

EC50 >100 mg/l (Algae) (72 h)

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LC50	>100 mg/l (daphnia) (48 h) >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)
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)
111-77-3 2-(2-methoxyethoxy)ethanol	
EC50	>100 mg/l (Algae) >100 mg/l (daphnia)
LC50 (static)	>100 mg/L (fish)
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 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.

13 Pembuangan Limbah

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.

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Uncleaned packaging:

Recommendation:

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

14 Informasi Transpor/Pengangkutan

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 Informasi yang Berkaitan dengan Regulasi

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

National regulations:

Information about limitation of use:

Employment restrictions concerning pregnant and lactating women must be observed.

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Informasi Lain

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.

Relevant phrases

H302 Harmful if swallowed.

H318 Causes serious eye damage.

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H319 Causes serious eye irritation.

H361 Suspected of damaging fertility or the unborn child.

Recommended restriction of use For industrial or professional purposes only.**Department issuing SDS:**

Gefahrstoffmanagement Konzern

ate.sicherheit@contiautomotive.com

Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - oral – Category 4

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/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.**

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