SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Print Date: 28.01.2011	Revision Date : 25.01.2011	Version : 2.3	GB / EN

Commercial Product Name: **Original ATE Brake Fluid DOT 3 (blue)**

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Commercial Product Name : Original ATE Brake Fluid DOT 3 (blue)

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

Use of the Substance/Mixture : Hydraulic fluid

1.3 Details of the supplier of the safety data sheet

Company : **Continental Aftermarket GmbH**
Guerickestrasse 7
60488 Frankfurt
Germany
+49-69-7603-1
+49-69-76 10 61

Contact person : Central Environment & Safety , Central Laboratory

E-mail address : ate.sicherheit@contiautomotive.com

1.4 Emergency telephone number

+ 49 61 32 84 46 3

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (67/548/EEC, 1999/45/EC)

2.2 Label elements

Special labelling of certain mixtures : Safety data sheet available on request for professional users.

2.3 Other hazards

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

3. Composition/information on ingredients

3.1 Mixtures

Chemical nature : Formulated product
Additives
Solvent mixture

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (1272/2008/EC)	Concentration [%]
Poly(oxy-1,2-ethanediyl), alpha-butyl-omega-hydroxy	9004-77-7	Xi; R36	Eye Irrit. 2; H319	>= 40 - < 45
2,2'-oxybisethanol	111-46-6 203-872-2	Xn; R22	Acute Tox. 4; H302	>= 20 - < 25
2-(2-methoxyethoxy)ethanol; diethylene glycol mono-methyl ether	111-77-3 203-906-6	Repr.Cat.3; R63	Repr. 2; H361	>= 3 - < 5
1,2-bis(2-methoxyethoxy)ethane; TEGDME; triethylene glycol dimethyl ether; triglyme	112-49-2 203-977-3	R19 Repr.Cat.2; R61 Repr.Cat.3; R62	Repr. 1B; H360	>= 0,2 - < 0,5
bis(2-methoxyethyl) ether	111-96-6 203-924-4	R10 R19 Repr.Cat.2; R60-R61	Flam. Liq. 3; H226 Repr. 1B; H360	>= 0,1 - < 0,2

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

General advice : Never give anything by mouth to an unconscious person. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Remove from exposure, lie down.

If inhaled : Move to fresh air in case of accidental inhalation of vapours or decomposition products. Keep patient warm and at rest. If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and water.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed : If swallowed, seek medical advice immediately and show this container or label. If a person vomits when lying on his back, place him in the recovery position.

4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	High volume water jet

5.2 Special hazards arising from the substance or mixture

5.3 Advice for firefighters

Special protective equipment for fire-fighters	:	Use personal protective equipment. Wear self-contained breathing apparatus and protective suit. Complete suit protecting against chemicals
Further information	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Standard procedure for chemical fires.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8. Ventilate the area. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapour or mist.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

6.4 Reference to other sections

see chapter: 7, 8, 11, 12 and 13

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Dust explosion class : not applicable

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place.

Advice on common storage : Never allow product to get in contact with water during storage. Keep away from food, drink and animal feedingstuffs. Keep away from oxidising agents, strongly acid or alkaline materials and amines.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end uses

no data available

8. Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Control parameters	Basis	Update
2,2'-oxybisethanol	111-46-6	TWA: 101 mg/m3, 23 ppm 2,	GB EH40	2005-04-06
2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether	111-77-3	TWA: 50,1 mg/m3, 10 ppm Sk, 2,	GB EH40	2007-08-01
Components	CAS-No.	Control parameters	Basis	Update
2-(2-methoxyethoxy)ethanol; diethylene glycol monomethyl ether	111-77-3	TWA: 50,1 mg/m3, 10 ppm skin,	2006/15/EC	2006-02-09

Other information on limit values: see chapter 16

8.2 Exposure controls

Engineering measures

Provide adequate ventilation.

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Respirator with filter type A
Respirator with a vapour filter (EN 141)

Hand protection

Material	:	butyl-rubber
Glove thickness	:	0,7 mm
Break through time	:	480 min
Directive	:	DIN EN 374

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

Eye protection : In case of splash hazard, please wear protective goggles.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Please thoroughly clean and care for the skin after finishing work.
Wash contaminated clothing before re-use.
When using do not eat, drink or smoke.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	no data available
Odour	:	characteristic
Odour Threshold	:	no data available
Flash point	:	> 118 °C Method: ISO 2592
Ignition temperature	:	230 °C Method: DIN 51794

Lower explosion limit	:	1,5 %(V)
Upper explosion limit	:	not determined
Explosive properties	:	no data available
Flammability (solid, gas)	:	no data available
Oxidizing properties	:	no data available
Autoignition temperature	:	not auto-flammable
Burning number	:	no data available
Molecular Weight	:	no data available
pH	:	7,5 - 10 at 20 °C
Boiling point/boiling range	:	> 245 °C
Vapour pressure	:	< 10 mbar at 20 °C
Density	:	1,04 - 1,07 g/cm3 Method: DIN 51757
Bulk density	:	not applicable
Water solubility	:	in all proportions at 20 °C
Partition coefficient: n-octanol/water	:	not applicable
Solubility in other solvents	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	14,5 - 17 mm2/s at 20 °C
Flow time	:	no data available
Impact Sensitivity	:	no data available
Relative vapour density	:	not applicable
Surface tension	:	no data available
Evaporation rate	:	no data available
Minimum ignition energy	:	no data available
Acid number	:	no data available
Refraction index	:	no data available
Miscibility in water	:	no data available
Solvent separation test	:	no data available

9.2 Other information

None known.

10. Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Stability: No decomposition if used as directed.

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Materials to avoid : Strong acids and oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon dioxide (CO2), Carbon monoxide, nitrogen oxides (NOx)

Thermal decomposition : > 360 °C

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : LD50 rat: > 2.000 mg/kg
Note: Effects due to ingestion may include:
Vomiting

Acute inhalation toxicity : no data available

Acute dermal toxicity : no data available

Acute toxicity (other routes of administration):

no data available

Skin corrosion/irritation

Skin irritation : No skin irritation
May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Eye irritation : No eye irritation
The liquid splashed in the eyes may cause irritation and reversible damage.

Respiratory or skin sensitization

Sensitisation:

no data available

Germ cell mutagenicity

Genotoxicity in vitro:

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Teratogenicity

1,2-bis(2-methoxyethoxy)ethane; TEGDME; triethylene glycol dimethyl ether; triglyme	:	Note: Tests in some animals may indicate that the technical active ingredient may have embryotoxic activity.

STOT - single exposure

no data available

STOT - repeated exposure

no data available

Aspiration hazard

Aspiration toxicity

no data available

Neurological effects

no data available

Toxicology Assessment

Toxicology, Metabolism, Distribution

no data available

Acute effects

no data available

Further information

Poly(oxy-1,2-ethanediyl), alpha-butyl-omega-hydroxy	:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

2,2'-oxybisethanol	:	Inhalation of high vapour concentrations can cause CNS-depression and narcosis. Liver and kidney injuries may occur. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

12. Ecological information

12.1 Toxicity

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 596 mg/l
Exposure time: 96 h
Method: DIN 38412

Toxicity to daphnia and other aquatic invertebrates.

2,2'-oxybisethanol	:	EC50 (Daphnia magna (Water flea)): > 10.000 mg/l Exposure time: 24 h

Toxicity to bacteria

2,2'-oxybisethanol	:	EC0 (Pseudomonas putida): 8.000 mg/l Exposure time: 16 h
1,2-bis(2-methoxyethoxy)ethane; TEGDME; triethylene glycol dimethyl ether; triglyme	:	EC0 (Bacteria): > 1.000 mg/l

12.2 Persistence and degradability

Biodegradability : Result: Readily biodegradable.
Biodegradation: 90 %

12.3 Bioaccumulative potential

Bioaccumulation : Remarks:
no data available

12.4 Mobility in soil

Physico-chemical removability : > 70 %
Remarks:
readily eliminated

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Adsorbed organic bound halogens (AOX)	:	Remarks: not included
Additional ecological information	:	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

13. Disposal considerations

13.1 Waste treatment methods

Advice on disposal and packaging	:	Disposal: Where possible recycling is preferred to disposal or incineration. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

The following Waste Codes are only suggestions:

Waste Code (EWC)	:	Waste Key (unused product): 160113, brake fluids Waste key (used product): 160113, brake fluids
Disposal of uncleaned packaging	:	Waste key (uncleaned packaging): 150110, packaging containing residues of or contaminated by dangerous substances Note: Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

ADR
Not dangerous goods

RID
Not dangerous goods

IATA
Not dangerous goods

IMDG
Not dangerous goods

Special precautions for user
see chapter: 6, 7 and 8

15. Regulatory information

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

15.2 Chemical Safety Assessment

no data available

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R10	Flammable.
R19	May form explosive peroxides.
R22	Harmful if swallowed.
R36	Irritating to eyes.
R60	May impair fertility.
R61	May cause harm to the unborn child.
R62	Possible risk of impaired fertility.
R63	Possible risk of harm to the unborn child.

Full text of H-Statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H360	May damage fertility or the unborn child.
H361	Suspected of damaging fertility or the unborn child.

Other information

2	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used
Sk	Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.
skin	Identifies the possibility of significant uptake through the skin

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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