

according to Regulation (EC) No. 1907/2006

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

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

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

### **1.1 Product identifier**

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

## 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	<ul> <li>Continental Aftermarket GmbH Guerickestrasse 7 60488 Frankfurt</li> </ul>
	Germany +49-69-7603-1 +49-69-76 10 61
Contact person E-mail address	<ul><li>Central Environment &amp; Safety , Central Laboratory</li><li>ate.sicherheit@contiautomotive.com</li></ul>

### 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

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Special labelling of certain mix- : Safety data sheet available on request for professional users. tures
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### 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



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### 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	lever give anything by mouth to an unconscious pers f accident or if you feel unwell, seek medical advice in show the label where possible). Remove from exposu	mmediately
If inhaled	Nove to fresh air in case of accidental inhalation of va omposition products. Keep patient warm and at rest. ersist, call a physician.	
In case of skin contact	Vash off with soap and water.	
In case of eye contact	n the case of contact with eyes, rinse immediately wit vater and seek medical advice.	h plenty of
If swallowed	swallowed, seek medical advice immediately and sh ainer or label. If a person vomits when lying on his ba the recovery position.	



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## 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	· Use personal protective equipment. Wear self-contained breathing

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 circums- tances and the surrounding environment. Fire residues and contami- nated 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



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## 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, inclu	Jdir	ng 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		

# 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; diethy- lene 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; diethy- lene 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



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Engineering measures	
Provide adequate ventilation.	
Personal protective equipment	
Respiratory protection	<ul> <li>In case of insufficient ventilation, wear suitable respiratory equipment.</li> <li>Respirator with filter type A</li> <li>Respirator with a vapour filter (EN 141)</li> </ul>
Hand protection	
Material Glove thickness Break through time Directive	: butyl-rubber : 0,7 mm : 480 min : 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.
<u>Hygiene measures</u>	<ul> <li>Handle in accordance with good industrial hygiene and safety practice.</li> <li>Please thoroughly clean and care for the skin after finishing work.</li> <li>Wash contaminated clothing before re-use.</li> <li>When using do not eat, drink or smoke.</li> </ul>

<u>Hygiene measures</u> :	Handle in accordance with good industrial hygiene and safe tice. Please thoroughly clean and care for the skin after finishing Wash contaminated clothing before re-use. When using do not eat, drink or smoke.
Environmental exposure controls	

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

## 9. Physical and chemical properties

General advice

### 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



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

### 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.



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## 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 prod- ucts	: 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



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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(2methoxyethoxy)ethane; TEGDME; triethylene glycol dimethyl ether; triglyme

#### 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), alphabutyl-omega-hydroxy Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Note: Tests in some animals may indicate that the technical active

ingredient may have embryotoxic activity.



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2,2'-oxybisethanol	:	and narcosi Liver and ki	s. dney injuries may occu	ations can cause CNS-depression r. al irritation, nausea, vomiting and
12. Ecological information				
12.1 Toxicity				
Toxicity to fish	:	LC50 (Leuc Exposure tir Method: DIN		e)): 596 mg/l
Toxicity to daphnia and other aqu	uatic	invertebrates	<u>.</u>	
2,2'-oxybisethanol	:	EC50 (Daph Exposure tir	nnia magna (Water flea ne: 24 h	)): > 10.000 mg/l
Toxicity to bacteria				
2,2'-oxybisethanol	:	EC0 (Pseuc Exposure tir	lomonas putida): 8.000 ne: 16 h	mg/l
1,2-bis(2- methoxyethoxy)ethane; TEGDME; triethylene glycol dimethyl ether; triglyme	:	EC0 (Bacte	ria): > 1.000 mg/l	
12.2 Persistence and degradability				
<b>Biodegradability</b>	:	Result: Rea Biodegrada	dily biodegradable. tion: 90 %	
12.3 Bioaccumulative potential				
<b>Bioaccumulation</b>	:	Remarks: no data ava	ilable	
12.4 Mobility in soil				
Physico-chemical removability	:	> 70 % Remarks: readily elimi	nated	
12.5 Results of PBT and vPvB assessment				

no data available



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## 12.6 Other adverse effects

Adsorbed organic bound halo- gens (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 packag- : ing	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 applica- tion 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 packag- : ing	Waste key (uncleaned packaging): 150110, packaging containing residues of or contaminated by dan- gerous substances				
	Note: Empty containers should be taken to an approved waste han- dling site for recycling or disposal.				

## 14. Transport information

ADR Not dangerous goods

**RID** Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods



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**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	n			
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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