1 Identification

Product identifier

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

Article number: 03.9901-58xx.x / 7058xx

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 GmbH
Guerickestr. 7
60488 Frankfurt a. M.
Germany
Tel: +49-69-76031
Fax: +49-69-761061

Information department:
Gefahrstoffmanagement Konzern, Zentrales Materiallabor
ate.sicherheit@contiautomotive.com

Emergency telephone number: +49-6132-84463

2 Hazard(s) identification

Classification of the substance or mixture

Health hazard

May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

Label elements

GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms GHS08

Signal word Warning

Hazard-determining components of labeling:
2,2'-oxybisethanol

Hazard statements
May cause damage to the kidneys through prolonged or repeated exposure. Route of exposure: Oral.

Precautionary statements
Do not breathe dust/fume/gas/mist/vapors/spray.
Get medical advice/attention if you feel unwell.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0</td>
</tr>
<tr>
<td>Fire</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

HMIS-ratings (scale 0 - 4)

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Fire</td>
<td>1</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

(Contd. on page 2)
Trade name: Original ATE Brake Fluid SL (DOT 4)

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

3 Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Dangerous components</th>
<th>Description</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>161907-77-3 Ethanol, 2-butoxy-, manufacture of, by-products from</td>
<td>&lt;15%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eye Dam. 1, H318</td>
<td></td>
</tr>
<tr>
<td>111-46-6 2,2'-oxybisethanol</td>
<td>&lt;10%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STOT RE 2, H373; Acute Tox. 4, H302</td>
<td></td>
</tr>
<tr>
<td>110-97-4 1,1'-iminodipropan-2-ol</td>
<td>&lt;2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eye Irrit. 2A, H319</td>
<td></td>
</tr>
</tbody>
</table>

4 First-aid measures

Description of first aid measures
General information: Remove contaminated clothes and shoes immediately.
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 fighting measures that suit the environment.
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:
Do not inhale explosion gases or combustion gases.
Wear self-contained respiratory protective device.

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

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, sawdust).
Dispose of the collected material 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
Keep out of the reach of children.
Open and handle receptacle with care.
Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires: 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.
Further information about storage conditions:
Store in dry conditions.
This product is hygroscopic.
Keep receptacle tightly sealed.

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

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters
Components 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:
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

Breathing equipment:
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 times 180 min; minimum layer thickness: 0.7 mm
Trade name: Original ATE Brake Fluid SL (DOT 4)

NBR (nitrile rubber): minimum breakthrough times 30 min; minimum layer thickness: 0.4 mm
The exact breakthrough time has to be found out by the manufacturer of the protective gloves and
has to be observed.

Eye protection: Safety glasses

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
- Color: Light yellow
- Odor: Characteristic
- Odor threshold: Not determined.

pH-value at 20 °C: 8.5 ((FMVSS 116))

Change in condition
- Melting point/Melting range: <-70 °C (DIN 51583)
- Boiling point/Boiling range: > 260 °C (FMVSS 116)

Flash point: 139 °C (ASTM D 7094 (closed cup))

Flammability (solid, gaseous): Not applicable.

Ignition temperature: > 200 °C (DIN 51794)

Decomposition temperature: > 360 °C (DSC)

Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Explosion limits:
- Lower: 1.5 Vol % (V)
- Upper: Not determined.

Vapor pressure at 20 °C: < 1 mbar

Density at 20 °C: 1.065 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)

Solvent content:
- Organic solvents: 18.0 %

Other information: No further relevant information available.

10 Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

(Contd. on page 5)
**Safety Data Sheet**

cacc. to OSHA HCS

Printing date 06/04/2015  
Reviewed on 05/30/2015

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

---

### 11 Toxicological information

**Information on toxicological effects**

**Acute toxicity:**

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
</tr>
</tbody>
</table>

**Primary irritant effect:**

- *on the skin:* No irritant effect.
- *on the eye:* No irritating effect.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

**Carcinogenic categories**

- **IARC (International Agency for Research on Cancer):** None of the ingredients is listed.
- **NTP (National Toxicology Program):** None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration):** None of the ingredients is listed.

---

### 12 Ecological information

**Toxicity**

**Aquatic toxicity:**

<table>
<thead>
<tr>
<th>EC50</th>
<th>6.25 mg/l (bacteria)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250-350 mg/l (fish)</td>
</tr>
</tbody>
</table>

**Persistence and degradability** No further relevant information available.

**Other information:** The product is easily biodegradable.

**Behavior 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 (Self-assessment): slightly hazardous for water
- Do not allow product to reach ground water, water course or sewage system.

**Results of PBT and vPvB assessment** Not applicable.

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.

---

### 13 Disposal considerations

**Waste treatment methods**

Waste disposal according EC-regulations 75/442/EEC and 91/689/EEC in the corresponding versions, covering waste and dangerous waste.

**Recommendation:** Must be specially treated adhering to official regulations.
Uncleaned packagings:
Recommendation:
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

### 14 Transport information

| UN-Number | DOT, TDG, ADN, IMDG, IATA | Void |
| UN proper shipping name | DOT, TDG, ADN, IMDG, IATA | Void |
| Transport hazard class(es) | DOT, TDG, ADN, IMDG, IATA | Class | Void |
| Packing group | DOT, TDG, IMDG, IATA | Void |
| Environmental hazards: Marine pollutant: | No |
| Special precautions for user | Not applicable. |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| UN "Model Regulation": | UN-, - |

### 15 Regulatory information

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

**Section 355 (extremely hazardous substances):**
None of the ingredients is listed.

**Section 313 (Specific toxic chemical listings):**
None of the ingredients is listed.

**TSCA (Toxic Substances Control Act):**
- 23783-42-8 2-(2-methoxyethoxy)ethanol
- 112-35-6 2-(2-(2-methoxyethoxy)ethoxy)ethanol
- 111-46-6 2,2'-oxybisethanol
- 112-27-6 2,2'-(ethylenedioxy)diethanol
- 112-60-7 3,6,9-trioxaundecane-1,11-diol
- 110-97-4 1,1'–iminodipropan-2-ol
- 67701-06-8 Fatty acids, C14-18 and C16-18-unsatd
- 68442-68-2 Benzenamine, N-phenyl-, styrenated
- 29385-43-1 methyl-1H-benzotriazole
- 4314-14-1 Fat Yellow 3G
- 68439-46-3 Alcohol ethoxylate (C9-C11, 6 EO)
- 7732-18-5 water, distilled, conductivity or of similar purity

(Contd. on page 7)
Proposition 65

<table>
<thead>
<tr>
<th>Chemicals known to cause cancer:</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemicals known to cause reproductive toxicity for females:</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemicals known to cause reproductive toxicity for males:</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemicals known to cause developmental toxicity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

Cancerogenity categories

<table>
<thead>
<tr>
<th>EPA (Environmental Protection Agency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TLV (Threshold Limit Value established by ACGIH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NIOSH-Ca (National Institute for Occupational Safety and Health)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

Canadian substance listings:

<table>
<thead>
<tr>
<th>Canadian Domestic Substances List (DSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30989-05-0  MTG-100-Borate</td>
</tr>
<tr>
<td>23783-42-8  2-(2-methoxyethoxy)ethanol</td>
</tr>
<tr>
<td>112-35-6    2-(2-(2-methoxyethoxy)ethoxy)ethanol</td>
</tr>
<tr>
<td>111-46-6    2,2'-oxybisethanol</td>
</tr>
<tr>
<td>112-27-6    2,2'-((ethylenedioxy)diethanol</td>
</tr>
<tr>
<td>112-60-7    3,6,9-trioxauandecane-1,11-diol</td>
</tr>
<tr>
<td>110-97-4    1,1'-iminodipropan-2-ol</td>
</tr>
<tr>
<td>67701-06-8  Fatty acids, C14-18 and C16-18-unsatd</td>
</tr>
<tr>
<td>68442-68-2  Benzenamine, N-phenyl-, styrenated</td>
</tr>
<tr>
<td>29385-43-1  methyl-1H-benzotriazole</td>
</tr>
<tr>
<td>4314-14-1   Fat Yellow 3G</td>
</tr>
<tr>
<td>68439-46-3  Alcohol ethoxylate (C9-C11, 6 EO)</td>
</tr>
<tr>
<td>7732-18-5   water, distilled, conductivity or of similar purity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Canadian Ingredient Disclosure list (limit 0.1%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Canadian Ingredient Disclosure list (limit 1%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>112-27-6    2,2'-((ethylenedioxy)diethanol</td>
</tr>
<tr>
<td>110-97-4    1,1'-iminodipropan-2-ol</td>
</tr>
</tbody>
</table>

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 Reserved for industrial and professional use.

Date of preparation / last revision 06/04/2015 / 6

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
Trade name: Original ATE Brake Fluid SL (DOT 4)

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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Acute Tox. 4: Acute toxicity, Hazard Category 4
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Sources
* Data compared to the previous version altered.