

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx
MSDS Number : 888100003543
Product Use Description : Hydraulic fluid
Company : **Continental Aftermarket GmbH**
Guerickestr. 7
60488 Frankfurt a. M.
Germany
Telephone : + 49 69 76 03 1
Telefax : + 49 69 76 10 61
Contact person : Corporate Hazardous Substances Management, Central
Material Laboratory
Emergency telephone : + 49 61 32 84 46 3
number

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Regulatory status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Signal Word : not applicable
Form : liquid
Colour : light yellow
Odour : characteristic
Odour - Control parameters : no data available
Hazard Summary : If used according to the instructions, no risks are expected for the user.

Potential Health Effects

Chronic Exposure : This product contains a material that may cause adverse reproductive effects.*

Carcinogenicity:

ACGIH : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

NTP	: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
IARC	: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
CA Prop 65	: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Weight percent
2,2'-(Ethylenedioxy)diethanol	112-27-6	>= 20 - < 25
2,2'-oxybisethanol	111-46-6	>= 20 - < 25
3,6,9-Trixaundecane-1,11-diol	112-60-7	>= 20 - < 25
2-[2-(2-butoxyethoxy)ethoxy]ethanol	143-22-6	>= 15 - < 20
2-(2-methoxyethoxy)ethanol	111-77-3	>= 3 - < 5

SECTION 4. 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.
Inhalation	: 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.
Skin contact	: Wash off with soap and water.
Eye contact	: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Ingestion	: 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.

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

SECTION 5. FIREFIGHTING MEASURES

Form	: liquid
Flash point	: >118 °C (244 °F) Method: ISO 2592
Ignition temperature	: ca.230 °C (446 °F) Method: DIN 51794
Lower explosion limit	: 1.5 %(V)
Upper explosion limit	: Note: not determined
Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media which shall not be used for safety reasons	: High volume water jet
Special protective equipment for firefighters	: 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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: 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.
Environmental precautions	: Do not flush into surface water or sanitary sewer system.
Methods for 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.

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

SECTION 7. HANDLING AND STORAGE

Handling

- 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

Storage

- 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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Components	CAS-No.	List	Type:	Value	Update
2,2'-oxybisethanol	111-46-6	US WEEL	TWA	10 mg/m3	2008-01-01

- Engineering measures : Provide adequate ventilation.
- Eye protection : In case of splash hazard, please wear protective goggles.
- Hand protection : 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.

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: liquid
Colour	: light yellow
Odour	: characteristic
Flash point	: >118 °C (244 °F) Method: ISO 2592
Ignition temperature	: ca.230 °C (446 °F) Method: DIN 51794
Thermal decomposition	: > 360 °C (> 680 °F)
Lower explosion limit	: 1.5 %(V)
Upper explosion limit	: not determined
pH	: 7.5 - 10 at 20 °C (68 °F)
Pour point	: <-70 °C (-94 °F) Method: DIN 51583
Boiling point/boiling range	: > 245 °C(> 473 °F)
Vapour pressure	: < 10 mbar at 20 °C (68 °F)
Relative vapour density	: not applicable

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

Density : 1.04 - 1.07 g/cm³
Method: DIN 51757

Bulk density : not applicable

Water solubility : at 20 °C (68 °F)
in all proportions

Partition coefficient: n-
octanol/water : not applicable

Viscosity, kinematic : 14.5 - 17 mm²/s
at 20 °C (68 °F)

Volatile organic compounds
(VOC) content : 4 %

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid : no data available

Materials to avoid : Strong acids and oxidizing agents

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

Thermal decomposition : > 360 °C

Hazardous reactions : Note: No decomposition if used as directed., Product is
hygroscopic.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat
Dose: > 2,000 mg/kg
The toxicological data has been taken from products of similar
composition.

Acute dermal toxicity : no data available

Acute inhalation toxicity : no data available

Skin irritation : rabbit

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

Result: No skin irritation
Method: OECD Test Guideline 404
The toxicological data has been taken from products of similar composition.

Eye irritation : rabbit
Result: No eye irritation
Method: OECD Test Guideline 405
The toxicological data has been taken from products of similar composition.

Carcinogenicity : No data is available on the product itself.
Reproductive toxicity : No data is available on the product itself.
Teratogenicity : No data is available on the product itself.

Component:

2,2'-(Ethylenedioxy)diethanol	112-27-6	<u>Acute oral toxicity:</u> LD50 rat Dose: 17,000 mg/kg <u>Acute dermal toxicity:</u> LD50 rat Dose: > 5,000 mg/kg <u>Skin irritation:</u> Classification: Irritating to skin. Result: Mild skin irritation <u>Eye irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation
2,2'-oxybisethanol	111-46-6	<u>Acute oral toxicity:</u> LD50 Dose: > 300 - 2,000 mg/kg
3,6,9-Trioxaundecane-1,11-diol	112-60-7	<u>Acute oral toxicity:</u> LD50 rat Dose: 29,000 mg/kg <u>Eye irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation
2-(2-methoxyethoxy)ethanol	111-77-3	<u>Acute oral toxicity:</u> LD50 mouse Dose: 7,128 mg/kg Method: OECD Test Guideline 401 <u>Acute dermal toxicity:</u> LD50 rabbit Dose: 9,404 mg/kg Method: OECD Test Guideline 402 <u>Acute inhalation toxicity:</u> LC0 rat Dose: > 1.2 mg/l Exposure time: 6 h Method: OECD Test Guideline 403 <u>Skin irritation:</u> rabbit Result: No skin irritation

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

Method: OECD Test Guideline 404

Eye irritation: rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

Reproductive toxicity: Suspected human reproductive toxicant, Suspected of damaging the unborn child.

SECTION 12. ECOLOGICAL INFORMATION

- | | | |
|--|---|---|
| Biodegradability | : | Result: Biodegradable
90 %
Information given is based on data on the components and the ecotoxicology of similar products. |
| Bioaccumulation | : | no data available |
| Toxicity to fish | : | LC50
Species: Leuciscus idus (Golden orfe)
Dose: 596 mg/l
Exposure time: 96 h
Information given is based on data on the components and the ecotoxicology of similar products. |
| Toxicity to bacteria | : | EC50
Species: Bacteria
Dose: > 15,000 mg/l
Information given is based on data on the components and the ecotoxicology of similar products. |
| Adsorbed organic bound halogens (AOX) | : | not included |
| Volatile organic compounds (VOC) content | : | 4 % |
| Additional ecological information | : | Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. |

Component:

2-(2-methoxyethoxy)ethanol

111-77-3

Toxicity to fish:

LC50

Species: Pimephales promelas (fathead minnow)

Dose: 5,741 mg/l

Exposure time: 96 h

Acute and prolonged toxicity for aquatic invertebrates:

EC50

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

Species: Daphnia magna (Water flea)

Dose: 1,192 mg/l

Exposure time: 48 h

Toxicity to algae:

EC50

Species: Pseudokirchneriella subcapitata (green algae)

Dose: > 1,000 mg/l

Exposure time: 96 h

Toxicity to bacteria:

Respiration inhibition of activated sludge EC50

Species:

Dose: > 1,000 mg/l

Exposure time: 30 min

Method: OECD Test Guideline 209

SECTION 13. DISPOSAL CONSIDERATIONS

Adequate disposal : In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

DOT 49 CFR

Not dangerous goods

TDGR

Not dangerous goods

ICAO / IATA-DGR

Not dangerous goods

IMDG-Code

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Reproductive hazard

TSCA Status : Listed on TSCA

DSL Status : This product contains one or several components listed in the Canadian NDSL.

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

SARA 311/312 Hazards : Chronic Health Hazard

ZUS_SAR313

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

The following components are subject to reporting levels established by SARA Title III, Section 313:

Components	CAS-No.
2-(2-(2-methoxyethoxy)ethoxy)ethanol	112-35-6
2-[2-(2-butoxyethoxy)ethoxy]ethanol	143-22-6
2-(2-methoxyethoxy)ethanol	111-77-3

ZUS_SAR302

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

ZUSPA_RTK

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Components	CAS-No.
3,6,9,12-tetraoxotridecanol	23783-42-8
2-(2-(2-methoxyethoxy)ethoxy)ethanol	112-35-6
2,2'-(Ethylenedioxy)diethanol	112-27-6
3,6,9-Trioxaundecane-1,11-diol	112-60-7
3,6,9,12-tetraoxatetradecane-1,14-diol	4792-15-8
2,2'-oxybisethanol	111-46-6
2-[2-(2-butoxyethoxy)ethoxy]ethanol	143-22-6
2-(2-methoxyethoxy)ethanol	111-77-3

ZUSMA_RTK

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Components	CAS-No.
2-(2-methoxyethoxy)ethanol	111-77-3

ZUSNJ_RTK

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Components	CAS-No.
3,6,9,12-tetraoxotridecanol	23783-42-8
2-(2-(2-methoxyethoxy)ethoxy)ethanol	112-35-6
2,2'-(Ethylenedioxy)diethanol	112-27-6
3,6,9-Trioxaundecane-1,11-diol	112-60-7
2,2'-oxybisethanol	111-46-6
2-[2-(2-butoxyethoxy)ethoxy]ethanol	143-22-6
2-(2-methoxyethoxy)ethanol	111-77-3

Material Safety Data Sheet

Print Date: 07/24/2013

Revision Date : 07/24/2013

Version : 3.3

Trade name: **Original ATE Brake Fluid DOT 3 G (yellow)- 03.9901-53xx.x / 7053xx**

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

Further information

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.

Prepared by : SAP BCS GmbH
Birlenbacher Str. 19
D-57078 Siegen
Germany
Telephone: +49-(0)271-88072-0
Revision Date : 07/24/2013
