

Safety Data Sheet

according to WHS Regulations

Printing date 04.04.2019

Version number 2.0

Revision: 04.04.2019

1 Identification

- **Product identifier**
- **Trade name:** BRAKE FLUID DOT 5.1
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Only for proper handling.
Brake fluid
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**

BUCHER AG LANGENTHAL
MOTOREX–Schmiertechnik
Bern–Zürich–Strasse 31
CH–4901 Langenthal
Telefon +41 (0)62 919 75 75

A1 Accessory Imports
60-62 Burchill St.
Loganholme
4129 QLD
Australia
Phone : 07 3451 1300
- **Further information obtainable from:** msds@motorex.com
- **Emergency telephone number:**
In case of a medical emergency following exposure to a chemical, call Poisons Information Centre Australia 13 11 26

2 Hazard(s) Identification

- **Classification of the substance or mixture**
The product is not classified, according to the Globally Harmonised System (GHS).

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition and Information on Ingredients

- **Chemical characterisation:** Mixtures
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 111-46-6 EINECS: 203-872-2 Index number: 603-140-00-6	2,2'-oxybisethanol Acute Tox. 4, H302	≥1-≤10%
CAS: 15520-05-5 EINECS: 239-555-0	Capryl amine ethoxylate 2-4 EO Acute Tox. 3, H301; Eye Dam. 1, H318; Skin Irrit. 2, H315	≥2.5-<3%

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

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4 First Aid Measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Remove residues with soap and water.
Remove contaminated clothing immediately.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
Consult a physician if irritation develops.
- **After swallowing:** Rinse mouth and immediately consult a physician
- **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:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Dilute with plenty of water.
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, sawdust).
- **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**
Good general ventilation should be sufficient for most conditions.
No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Keep container tightly closed; product is hygroscopic.
Store in cool, dry well ventilated area away from sources of ignition and heat.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Storage class:** 10

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

8 Exposure controls and personal protection

· **Additional information about design of technical facilities:** No further data; see section 7.· **Control parameters**· **Ingredients with limit values that require monitoring at the workplace:**

111-46-6 2,2'-oxybisethanol

NES Long-term value: 100 mg/m³, 23 ppmWES Long-term value: 100 mg/m³, 23 ppm· **DNELs**

111-46-6 2,2'-oxybisethanol

Dermal	DNEL / Workers / Systemic effects / Long-term	43 mg/kg/24h (worker)
	DNEL/general population/Systemic effects/Long-term	21 mg/kg/24h (consumer)
Inhalative	DNEL / Workers / Systemic effects / Long-term	44 mg/m ³ (worker)
	DNEL / Workers / Local Effects / Long-term	60 mg/m ³ (worker)
	DNEL/general population/Systemic effects/Long-term	12 mg/m ³ (consumer)
	DNEL/general population/Local effects/Long-term	12 mg/m ³ (consumer)

· **PNECs**

111-46-6 2,2'-oxybisethanol

PNEC / Aquatic organisms / Freshwater	10 mg/l (aquatic organisms)
PNEC / Aquatic organisms / Marine water	1 mg/l (aquatic organisms)
PNEC/Aquatic org/intermittent releases(freshwater)	10 mg/l (aquatic organisms)
PNEC/Aquatic organisms/Sewage treatment plant/STP	199.5 mg/l (aquatic organisms)
PNEC / Aquatic organisms / Sediment (freshwater)	20.9 mg/kg (aquatic organisms)
PNEC / Aquatic organisms / Sediment (marine water)	2.09 mg/kg (aquatic organisms)
PNEC / Terrestrial organism / Soil	1.53 mg/kg (terrestrial organisms)

· **Additional information:** The lists valid during the making were used as basis.· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

Respiratory protection if formation of aerosol or mist: use mask with filter type A2, A2/P2 or ABEK.

· **Protection of hands:**

Impervious gloves

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**

Use CR or NBR rubber gloves. Material thickness: 0.5 mm

Protective gloves to EN374, resistant to oil in use. Standard EN 374 Level 3 control G1

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.

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

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- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
For the mixture of chemicals mentioned below the penetration time has to be at least 60 minutes (Permeation according to EN 374 Part 3: Level 1).
- **Eye protection:** Goggles recommended during refilling
- **Body protection:** Protective work clothing

9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
 - Form: Fluid
 - Colour: Yellow
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
 - Melting point/freezing point: Undetermined.
 - Initial boiling point and boiling range: >260 °C (DIN EN ISO 3405)
- **Flash point:** >126 °C
- **Flammability (solid, gas):** Not applicable.
- **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:** Not determined.
- **Density at 20 °C:** 1.06 g/cm³ (ASTM D 4052)
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with water:** Fully miscible.
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity:**
 - Dynamic: Not determined.
 - Kinematic: 7 mm²/s @ 40 °C (DIN 51562-1)
- **Solids content:** 0.0 %
- **Other information** No further relevant information available.

10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.

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- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.
- **Additional information:** The product is stable but hygroscopic.

11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**

- **LD/LC50 values relevant for classification:**

111-46-6 2,2'-oxybisethanol

Oral	LD50	1,000 mg/kg (rat)
	NOAEL	10,000 mg/kg (rat)
	NOAEL	128-300 mg/kg/24h (rat)
	LOAEL	40,000 mg/kg (rat)
Dermal	LD50	13,300 mg/kg (rabbit)
	NOAEL	2,200-4,400 mg/kg/24h (dog)
Inhalative	LC50 / 4h	>4.6 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** No irritant effect.
- **Serious eye damage/irritation** No irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**

The sweet taste can seduce children to drink large quantities; hence keep out of reach of children.

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 Ecological Information

- **Toxicity**

- **Aquatic toxicity:**

111-46-6 2,2'-oxybisethanol

LC50	75.2 mg/l/96h (fish)
LC50	1,500 mg/l/28d (fish)
EC50	10,000 mg/l/24h (aquatic invertebrates)
EC50	6,500-13,000 mg/l/96h (algae / cyanobacteria)
EC50	33,911 mg/l/21d (aquatic invertebrates)
NOEC	7,500-15,000 mg/l/21d (aquatic invertebrates)
NOEC	100 mg/l/72h (algae / cyanobacteria)
NOEC	8,590-24,000 mg/l/7d (aquatic invertebrates)
	15,380-32,000 mg/l/7d (fish)

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**

- **Bioaccumulative potential**

111-46-6 2,2'-oxybisethanol

Partition coefficient	≤1.98 [---] (log Kow) (Bioaccumulation)
Biodegradability	90-100 % (28d) (Biodegradability) (OECD 301 A)

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- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (according to Appendix 1 AwSV): 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 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Contact waste processors for recycling information.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- | | |
|-----------------------------------------------------------------------------|-----------------|
| · UN-Number | |
| · ADG, ADN, IMDG, IATA | Void |
| · UN proper shipping name | |
| · ADG, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · ADG, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · ADG, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · 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 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Australian Inventory of Chemical Substances**
111-46-6 | 2,2'-oxybisethanol
- **Standard for the Uniform Scheduling of Medicines and Poisons**
None of the ingredients is listed.

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- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **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.

The classification of the mixture was carried out by calculation in accordance with the rules laid down in Annex I of Regulation (EC) No 1272/2008.

No special training instructions to ensure protection of human health and environment are required.

- **Relevant phrases**

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

- **Department issuing SDS:** Abteilung Produktsicherheit

- **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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

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

- *** Data compared to the previous version altered.**