

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.12.2012

Version number 1

Revision: 11.12.2012

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

- **Product identifier**
- **Trade name:** COOLANT M5.0 READY TO USE
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation**
Only for proper handling.
Engine coolant
- **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
- **Only representative in EU:**
MOTOREX Deutschland AG, Bismarckstrasse 28, D-69198 Schriesheim
- **Further information obtainable from:** msds@motorex.com
- **Emergency telephone number:**
Toxicological Information Centre, CH-8028 Zurich,
info@toxi.ch,
T. +41 (0) 44 251 51 51

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R22: Harmful if swallowed.

- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

GB

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(Contd. of page 1)

· Hazard pictograms



GHS07

· Signal word Warning

· Hazard-determining components of labelling:

ethanediol

· Hazard statements

H302 Harmful if swallowed.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P270 Do not eat, drink or smoke when using this product.

P264 Wash thoroughly after handling.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 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 substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 107-21-1	ethanediol	 Xn R22	25-50%
EINECS: 203-473-3		 Acute Tox. 4, H302	

· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· Description of first aid measures

· General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· 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: Call for a doctor immediately.

(Contd. on page 3)

Safety data sheet

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Revision: 11.12.2012

Trade name: COOLANT M5.0 READY TO USE

(Contd. of page 2)

- **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 Firefighting 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:** 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).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **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.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **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:**
Do not store in zinc containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store containers closed and protect against rain, dust, heat and other atmospheric influences.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

(Contd. on page 4)

Safety data sheet

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Revision: 11.12.2012

Trade name: COOLANT M5.0 READY TO USE

(Contd. of page 3)

- **Control parameters**
- **Ingredients 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.
- **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:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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.
- **Eye protection:** Goggles recommended during refilling

9 Physical and chemical properties

- | | |
|--|------------------------------|
| · Information on basic physical and chemical properties | |
| · General Information | |
| · Appearance: | |
| Form: | Fluid |
| Colour: | Turquoise |
| Odour: | Characteristic |
| Odour threshold: | Not determined. |
| · pH-value: Not determined. | |
| · Change in condition | |
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | 100°C (DIN EN ISO 3405) |
| Flash point: | > 120°C |
| Flammability (solid, gaseous): | Not applicable. |
| Ignition temperature: | 410°C (DIN 51794) |
| Decomposition temperature: | Not determined. |
| Self-igniting: | Product is not selfigniting. |

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

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Revision: 11.12.2012

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(Contd. of page 4)

· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	3.2 Vol %
Upper:	15.3 Vol %
· Vapour pressure at 20°C:	23 hPa
· Density at 20°C:	1.072 g/cm ³ (ASTM D 4052)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	2 mm ² /s @ 40 °C (DIN 51562-1)
· Solvent content:	
Organic solvents:	0.0 %
Water:	49.0 %
· 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.
- **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.

11 Toxicological information

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

· LD/LC50 values relevant for classification:		
107-21-1 ethanediol		
Oral	LD50	2000 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

(Contd. on page 6)

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Revision: 11.12.2012

Trade name: COOLANT M5.0 READY TO USE

Harmful

(Contd. of page 5)

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour 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 (German Regulation) (Self-classification according VwVwS, 17.05.1999): 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.
 - **European waste catalogue**
- | | |
|-----------|---|
| 16 01 14* | antifreeze fluids containing dangerous substances |
|-----------|---|
- **Uncleaned packaging:**
 - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---------------------------------------|-----------------|
| · UN-Number | Void |
| · ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | Void |
| · ADR, ADN, IMDG, IATA | Void |
| · Transport hazard class(es) | Void |
| · ADR, ADN, IMDG, IATA | Void |
| · Class | Void |
| · Packing group | Void |
| · ADR, IMDG, IATA | Void |
| · Environmental hazards: | No |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |

(Contd. on page 7)

Safety data sheet

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(Contd. of page 6)

- | | |
|---|-----------------|
| · Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not applicable. |
| · UN "Model Regulation": | - |

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15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National chemical directories**
Components listed or exempted from listing:
 EINECS/ELINCS/NLP (EU)
 TSCA (USA)
 DSL/NDSL (CDN)
 ENCS/METI (J)
 AICS (Aus)
 IECSC (CN)
 ECL/KECI (KOR)
 HSNO (NZ)
 PICCS (RP)
- **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.

- **Relevant phrases**
 H302 Harmful if swallowed.

 R22 Harmful if swallowed.
- **Department issuing MSDS:** Abteilung Produktsicherheit
- *** Data compared to the previous version altered.**

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