

## 1 Identification

- **Product identifier**
- **Trade name:** COOLANT M5.0 READY TO USE
- **Application of the substance / the mixture**  
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  
  
Lube-Tech  
Lubrication Technologies, Inc.  
900 Mendelssohn Avenue North  
US-55427 Golden Valley, Minnesota  
Phone: 001 763 417 1357
- **Information department:** [msds@motorex.com](mailto:msds@motorex.com)
- **Emergency telephone number:**  
Toxicological Information Centre  
CH-8028 Zurich  
[info@toxi.ch](mailto:info@toxi.ch)  
T. +41 (0)44 251 51 51  
USA + Kanada: 1 800 424 9300 (Chemtrec Chemical Manufacturers Association, Arlington, VA 22209)

## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
The product is not classified according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



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

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· **vPvB:** Not applicable.

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### 3 Composition/information on ingredients

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

· **Dangerous components:**

CAS: 107-21-1 Reg.nr.: 01-2119456816-28	ethanediol	 Acute Tox. 4, H302	50-70%
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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:** If symptoms persist consult doctor.
- **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 fighting measures that suit the environment.
- **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.

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See Section 13 for disposal information.

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### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Keep out of the reach of children.  
No special measures required.
- **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:**  
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.
- **Storage class:** 10
- **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:**

**107-21-1 ethanediol**

TLV	Short-term value: NIC-127* mg/m <sup>3</sup> Long-term value: NIC-10** NIC-63.5* mg/m <sup>3</sup> , NIC-25* ppm Ceiling limit value: (100) mg/m <sup>3</sup> (H); *inh. fraction + vapor, P: **inh. fraction, H
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- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **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.

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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.
- **Eye protection:** Goggles recommended during refilling.

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Color:	turquoise
- **Odor:** Characteristic
- **Odor threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F) (DIN EN ISO 3405)
- **Flash point:** > 120 °C (> 248 °F)
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:** 410 °C (770 °F) (DIN 51794)
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**

Lower:	3.2 Vol %
Upper:	15.3 Vol %
- **Vapor pressure at 20 °C (68 °F):** 23 hPa (17 mm Hg)
- **Density at 20 °C (68 °F):** 1.076 g/cm<sup>3</sup> (8.979 lbs/gal) (ASTM D 4052)
- **Relative density** Not determined.
- **Vapor density** Not determined.
- **Evaporation rate** Not determined.
- **Solubility in / Miscibility with**

Water:	Fully miscible.
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- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**

Dynamic:	Not determined.
Kinematic:	2 mm <sup>2</sup> /s @ 40 °C (DIN 51562-1)
- **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.

### 11 Toxicological information

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

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

<b>107-21-1 ethanediol</b>		
Oral	LD50	1600 mg/kg (mouse)

- **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 is not subject to classification according to internally approved calculation methods for preparations:

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

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.
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- **NTP (National Toxicology Program)**

None of the ingredients is listed.
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- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.
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### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **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-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.

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### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** *Smaller quantities can be disposed of with household waste.*
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*
- **Recommended cleansing agent:** *Water, if necessary with cleansing agents.*

### 14 Transport information

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

### 15 Regulatory information

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

· <b>Section 355 (extremely hazardous substances):</b>	
	<i>None of the ingredients is listed.</i>
· <b>Section 313 (Specific toxic chemical listings):</b>	
107-21-1	ethanediol
· <b>TSCA (Toxic Substances Control Act):</b>	
107-21-1	ethanediol
7732-18-5	water, distilled, conductivity or of similar purity
532-32-1	sodium benzoate
· <b>Proposition 65</b>	
· <b>Chemicals known to cause cancer:</b>	
	<i>None of the ingredients is listed.</i>
· <b>Chemicals known to cause reproductive toxicity for females:</b>	
	<i>None of the ingredients is listed.</i>

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**· Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**· Chemicals known to cause developmental toxicity:**

107-21-1 | ethanediol

**· Carcinogenic categories**
**· EPA (Environmental Protection Agency)**

12179-04-3 | disodium tetraborate pentahydrate | I (oral)

**· TLV (Threshold Limit Value established by ACGIH)**

107-21-1 | ethanediol | A4

12179-04-3 | disodium tetraborate pentahydrate | A4

**· NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**· 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.

**· Department issuing SDS:** Abteilung Produktsicherheit

**· Date of preparation / last revision** 03/22/2016 / -

**· Abbreviations and acronyms:**

Acute Tox. 4: Acute toxicity, Hazard Category 4

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