

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.12.2011

Revision: 06.12.2011

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

- **Product identifier**
- **Trade name:** Coolant
- **Article number:** PC.10.00
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**
 - SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
 - SU21 Consumer uses: Private households / general public / consumers
 - SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- **Process category**
 - PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/ large containers at dedicated facilities
 - PROC11 Non industrial spraying
- **Environmental release category**
 - ERC8d Wide dispersive outdoor use of processing aids in open systems
- **Application of the substance / the preparation**
 - Engine Antifreeze
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 - Putoline Oil
 - Dollegoorweg 15
 - NL-7602 EC ALMELO
 - Tel.: +31 (0)546 818165
- **Further information obtainable from:** Product safety department - vib@putoline.com
- **Emergency telephone number:** +31 (0)546 818165 (9 AM to 4 PM, Monday to Friday)

* 2 Hazards identification

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



GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- **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 EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**



Xn Harmful

- **Hazard-determining components of labelling:**

ethanediol

- **Risk phrases:**

22 Harmful if swallowed.

- **Safety phrases:**

2 Keep out of the reach of children.

13 Keep away from food, drink and animal feedingstuffs.

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- 23 Do not breathe fumes/aerosol.
- 36 Wear suitable protective clothing.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 56 Dispose of this material and its container to hazardous or special waste collection point.

- 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	25-50%
EINECS: 203-473-3	 Xn R22	
Reg.nr.: 01-2119456816-28	 STOT RE 2, H373;  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: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Call for 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: If swallowed or in case of vomiting, danger of entering the lungs.

* 5 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents: Water haze
Alcohol resistant foam
Fire-extinguishing powder
Carbon dioxide
- Special hazards arising from the substance or mixture: Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
- Protective equipment: Wear self-contained respiratory protective device.
Wear fully protective suit.

* 6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Wear protective clothing.
- 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).
Dispose contaminated material as waste according to item 13.
- 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.

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* 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
- **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.
- **Control parameters**

· Ingredients with limit values that require monitoring at the workplace:	
107-21-1 ethanediol	
WEL	Short-term value: 104** mg/m ³ , 40** ppm Long-term value: 10* 52** mg/m ³ , 20** ppm Sk *particulate **vapour

- **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.
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:**
- **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.
Butyl rubber, BR
- **Penetration time of glove material** The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **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:	Liquid
Colour:	Yellow
· Odour:	Characteristic
· pH-value at 20°C:	7
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	> 100°C
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	410°C

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· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	3.2 Vol %
Upper:	53.0 Vol %
· Vapour pressure at 20°C:	0.1 hPa
· Density at 20°C:	1.05 g/cm ³
· Solubility in / Miscibility with water:	Fully miscible.
· Segregation coefficient (n-octanol/water):	Not determined.
· Solvent content:	
Organic solvents:	0.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Possibility of hazardous reactions** Reacts with strong oxidizing agents.
- **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	5840 mg/kg (rat)
Dermal	LD50	9530 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: Harmful

12 Ecological information

- **Toxicity**

· Aquatic toxicity:		
107-21-1 ethanediol		
EC50 (48 h)		41100 mg/l (daphnia)

- **Persistence and degradability** No further relevant information available.
- **Other information:** The product is biodegradable.
- **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-assessment): 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.

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- **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.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number	
· ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	
· ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· ADR, 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":	-

* 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **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.
H373 May cause damage to organs through prolonged or repeated exposure.
R22 Harmful if swallowed.
- **Department issuing MSDS:** Product safety department.
- **Contact:** Product safety department
- **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)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
- **Sources** 67/548/EEC - Dangerous Substances Directive
99/45/EEC - Dangerous Preparations Directive

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