

EG-SAFETY DATA SHEET (91/155/EWG)

Product name: „Coollaboratory Liquid Coolant Pro blue“, concentrate
„Coollaboratory Liquid Coolant Pro UVgreen“, concentrate
Version 2.0 / ENG: Rewrite at 20.08.2010

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY

- 1.1 Identification of substance/preparation:**
„Coollaboratory Liquid Coolant Pro“ coolant concentrate
- 1.2 Use of substance/preparation:**
corrosion preventative for PC water cooling systems
- 1.3 EG-Supplier (Company/Supplier/Dealer):**
Coollaboratory
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- Product support:**
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2. COMPOSITION/INFORMATION ON CONSTITUENTS

- 2.1 Chemical characterization:**
The concentrate contains 1.2 ethane diol (Glycol) in aqueous solution, inhibitors for avoiding corrosion and dyestuffs.
The coolant contains 90% of 1.2 ethane diol. (Glycol)

Contents materials: 1.2 Ethandiol CAS-Nr.: 107-21-1 EG-Nr.: 203-473-3

3. POTENTIAL HAZARDS

3.1 Classification:



Noxious Xn

R22: Noxious if swallowed
S2: Keep out of reach of children
S24/25: The skin contact is to be avoided. If however skin contact did occur rinse lots of water.
S45/46: If swallowed, seek medical advice immediately and show instruction.

4. FIRST AID MEASURES

- 4.1 After skin contact:**
Wash off with plentifully water and soap, remove the contaminated clothes.
- 4.2 After eye contact:**
Rinse out with plentifully lukewarm water with opened eyelid gap.
- 4.3 After swallowing:**
Drink a lot of water immediately. Please consult an emergency physician.

5. FIRE-FIGHTING MEASURING

- 5.1 Classification:** fire class B liquid substances, explosion group IIB
- 5.2 Suitable fire extinguishing agents:**
Water, dry powder, CO2 - Co-ordinate with environment.
- 5.3 Special endangerment by the material or the product, its combustion products or developing gases:**
Flame resistant, with flame point over 100°C
Attention dangerous decomposition products possible,
Decomposition from 165 °C decomposition temperature.

6. HANDLING AND STORAGE

- 6.1 References to safe handling:**
Avoid bury and unnecessary contact.
- 6.2 Storage**
Use no food containers, containers have to be permanently marked and locked, use only the original container for store, do not store together with food, drug and animal feed.

7. PERSONAL PROTECTIVE EQUIPMENT

- 7.1 Hand protection:**
With full contact:
Glove material: Nitril India rubber
Layer strength: 0,35 mm
Break-through time: > 8 hours
- 7.2 Eye protection:**
Wear protective goggles in case of potential contact with the eyes.
- 7.3 Body protection:**
Wear suitable work clothing if there is a risk of splashing.
- 7.4 Data to the industrial hygiene:**
Switch contaminated clothes. Wash your hands after work with the product.
Ingest no food or luxuries in the work area.

8. PHYSICAL AND CHEMICAL PROPERTIES

- 8.1 Appearance**
Form: liquid, a bit more viscously than water
Color: clear liquid (blue/green)
Odor: product specific (sweetish)

8.2 Safety-relevant data

characteristic	value
Melting point (°C)	-16°C°C
Boiling point (°C)	> 179°C
Inflammability (°C)	410°C
flash point (°C)	111°C
Vapor pressure (°C)	<5,3 Pa at 20 °C
Density (g/cm ³)	1,109 g/cm ³
Solubility in water (20°C in g/l)	Complete mixable
lower explosion limit	3,2 Vol% (80g/m ³)

upper explosion limit	43 Vol% (1090g/m3)
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9. STABILITY AND REACTIVITY

9.1 Conditions to be avoided:

Decomposition temperature is at 165°C.

9.2 Substances to be avoided:

Chlorine sulfone acid, sodium hydroxide, sulfuric acid, chrome connections, peroxides, Chlorates

9.3 Other information:

If necessary, the product should be tested under the specific conditions to determine any reactions with materials and chemical substances.

10. TOXICOLOGICAL INFORMATION

10.1 Effects at humans:

**The ready-use-mixture contains 90% of 1.2 ethane diol. (Glycol)
Glycol is a noxious substance.**

The main absorption ways are the alimentary system and the skin. Ethyl glycol affects irritant to mucous membranes, especial of the eye, by absorption over the alimentary system, when swallowing, it also affects with higher doses toxically the nerve tissue, there could be disturb to the heart, cycle and metabolism system, as well as damages to the kidneys. As minimum lethal dose for humans are indicated 100ml or 1.4 g/kg body weight.

<u>After inhalation:</u>	Due to the very low steam pressure not applicably.
<u>After skin contact:</u>	Skin absorption possible. Toxicological not relevant.
<u>After eye contact:</u>	mucous membrane irritation is possible, by weakly irritant effect.
<u>After swallowing:</u>	Danger of poisoning! Contact emergency surgeon immediately.

10.2 General remarks:

The product is to be handled with the caution usual with chemicals.

11. ECOLOGICAL INFORMATION

11.1 Ecological toxicity:

The product is mixable with water.
Quantitative data for the ecological effect of this product are not present.

11.2 Overall evaluation:

In the case of appropriate handling and use no ecological problems are to be expected.

12. DISPOSAL INFORMATION

12.1 Disposal:

Intended use or recycling is to be preferred to the disposal. The product should be disposed according to the locally valid laws on waste disposal and (the competent authorities are responsible to give the necessary information).

12.2 Additional references:

Cleaning agent: diluted, warmed up hydrochloric acid. Soap/water solution for surfaces.

13. TRANSPORT INFORMATION

13.1 Transportation by road/rail (ADR/RID/GGVSE): no restrictions

13.2 Transportation by sea/marine (IMDG-Code/GGVSee): no restrictions

13.3 Transportation by air transport (ICAO-IATA/DGR): no restrictions

13.4 Additional references:

The transportation regulations are quoted after the international adjustments and in the form, how they are used in Germany. Possible deviations in other countries are not considered.

14. REGULATORY INFORMATION

The product is compliant with the guideline 2002/95/EG (RoHS) and does not exceed the predetermined conditions of the guideline 2005/618/EG.

The product is equal to the terms and conditions of the ElektroG- particularly with regard to indexed commodity substance prohibition at the chapter 2,§5 (1).

National regulations:

Water hazard class: WKG1 (weak hazardous to water)

TRGS 900 workplace limit values: 10 ml/m³ or 26 mg/m³

RL 2000/39/EG objective workplace limit value of the EG: 8 hours objective value 52 mg/m³

16. OTHER DATA

Coolaboratory doesn't assume any responsibility for the incorrect usage of this product and the resulting damages and consequences.

The data rely on the today's conditions of our knowledge and serve to describe the product regarding safety precautions which can be met. They do not represent a warranty of the product described by characteristics.