

**Cooler® L - water mixture 25 - 50 %**

Print date 07.12.2022  
Revision date 07.12.2022  
Version 4.0 (en)  
replaces version of 23.09.2021 (3.0)

**\* SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

**Trade name/designation** Cooler® L - water mixture 25 - 50 %  
**Art-Nr(n).** 1692-25 - 1692-50

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

**Use of the substance/mixture**  
Cooling liquid brine.  
Functional fluid.

**1.3 Details of the supplier of the safety data sheet**

**Supplier**  
GHC Gerling, Holz & Co. Handels GmbH  
Ruhrstraße 113  
D-22761 Hamburg  
Telephone +49 40 853 123 0  
E-mail hamburg@ghc.de  
Website www.ghc.com

Department responsible for information:  
GHC Gerling, Holz & Co. Handels GmbH  
Telephone +49 40 853 123 0

E-mail (competent person):  
msds@ghc.de

**\* 1.4 Emergency telephone number**

EN: Poison Information Center Mainz +49 6131 19240

**\* SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Remark**  
The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

**2.2 Label elements**

No data available

**\* 2.3 Other hazards**

**\* Other adverse effects**  
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Results of PBT and vPvB assessment**  
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**\* SECTION 3: Composition / information on ingredients**

**3.1 Substances**

not applicable

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**\* 3.2 Mixtures****Hazardous ingredients**

CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
57-55-6	200-338-0	Propane-1,2-diol	≥ 22.5 ≤ 50 weight-%		ATE(oral): 22000 mg/kg ATE(dermal): > 2000 mg/kg ATE(inhalation vapour): > 100000 ppm

REACH No.	Substance name
01-2119456809-23	Propane-1,2-diol

**Remark**

Aqueous solution of mono propylene glycol (propane-1,2-diol) with corrosion inhibitors.

**\* SECTION 4: First aid measures****\* 4.1 Description of first aid measures****\* General information**

Remove contaminated, saturated clothing immediately.

**Following inhalation**

Remove casualty to fresh air and keep warm and at rest.  
 In the event of symptoms refer for medical treatment.

**\* Following skin contact**

After contact with skin, wash immediately with plenty of water and soap.  
 In case of skin irritation, consult a physician.

**\* After eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical assistance.

**Following ingestion**

Do NOT induce vomiting.  
 Rinse mouth immediately and drink plenty of water.  
 Call a physician immediately.

**4.2 Most important symptoms and effects, both acute and delayed****Symptoms**

The following symptoms may occur in case of strong exposition:  
 Eye Irritation  
 Gastrointestinal complaints

**4.3 Indication of any immediate medical attention and special treatment needed****Notes for the doctor**

Treat symptomatically.

**\* SECTION 5: Firefighting measures****\* 5.1 Extinguishing media****\* Suitable extinguishing media**

Extinguishing powder  
 alcohol resistant foam  
 Water spray jet  
 Carbon dioxide (CO<sub>2</sub>)

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**Unsuitable extinguishing media**

Full water jet

**5.2 Special hazards arising from the substance or mixture**

**Hazardous combustion products**

In case of fire formation of dangerous gases possible.

Carbon monoxide

Carbon dioxide (CO<sub>2</sub>)

**\* 5.3 Advice for firefighters**

**\* Special protective equipment for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing.

**\* Additional information**

Use water spray jet to protect personnel and to cool endangered containers.

Exposure to fire may cause rupture / explosion of the containers.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

**\* SECTION 6: Accidental release measures**

**\* 6.1 Personal precautions, protective equipment and emergency procedures**

**\* For non-emergency personnel**

Use personal protection equipment.

Leave the danger area.

**For emergency responders**

Personal protection by wearing close-fitting protective clothing and breathing apparatus.

Remove persons to safety.

**6.2 Environmental precautions**

Do not allow to enter into soil/subsoil.

Do not allow to enter into surface water or drains.

**\* 6.3 Methods and material for containment and cleaning up**

**\* For containment**

Prevent the liquid from spreading over a wide area (set up barriers, cover sewage systems).

**\* For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Collect in closed and suitable containers for disposal.

**6.4 Reference to other sections**

Disposal: see section 13

Personal protection equipment: see section 8

**\* SECTION 7: Handling and storage**

**\* 7.1 Precautions for safe handling**

**\* Protective measures**

Use only in well-ventilated areas.

Do not inhale gases/vapours/aerosols.

Usual measures for fire prevention.

If used properly, no special measures are required

**Advices on general occupational hygiene**

When using do not eat, drink, smoke, sniff.

Wash hands before breaks and after work.

Remove contaminated clothing and protective equipment before entering eating areas.

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\* **7.2 Conditions for safe storage, including any incompatibilities**\* **Requirements for storage rooms and vessels**

All regulations and local requirements for the storage of containers have to be respected.  
 Keep container tightly closed and in a well-ventilated place.  
 Only use containers specifically approved for the substance/product.

**Storage class**

12 non-combustible liquids that cannot be assigned to any of the above storage classes

\* **Materials to avoid**

Do not store together with explosives.  
 Do not store together with infectious substances.  
 Do not store together with radioactive material.  
 Do not store together with food or feed.

\* **7.3 Specific end use(s)**\* **Recommendation**

See section 1.2  
 An exposure scenario is not required.

\* **SECTION 8: Exposure controls/personal protection**\* **8.1 Control parameters****Occupational exposure limit values**

CAS No.	EC No.	Substance name	occupational exposure limit value
57-55-6		Propane-1,2-diol, particulates	10 [mg/m <sup>3</sup> ] (IE)
57-55-6		Propane-1,2-diol, total vapour and particulates	150 [ml/m <sup>3</sup> (ppm)] 470 [mg/m <sup>3</sup> ] (IE)
57-55-6		Propane-1,2-diol, particulates	10 [mg/m <sup>3</sup> ] (UK)
57-55-6		Propane-1,2-diol, total vapour and particulates	150 [ml/m <sup>3</sup> (ppm)] 474 [mg/m <sup>3</sup> ] (UK)

\* **DNEL worker**

CAS No.	Substance name	DNEL value	DNEL type	Remark
57-55-6	Propane-1,2-diol	10 mg/m <sup>3</sup>	long-term inhalative (local)	Assessment factor 9, repeated dose toxicity.
57-55-6	Propane-1,2-diol	168 mg/m <sup>3</sup>	long-term inhalative (systemic)	Assessment factor 3, repeated dose toxicity.

\* **DNEL Consumer**

CAS No.	Substance name	DNEL value	DNEL type	Remark
57-55-6	Propane-1,2-diol	10 mg/m <sup>3</sup>	long-term inhalative (local)	Assessment factor 15, repeated dose toxicity.
57-55-6	Propane-1,2-diol	50 mg/m <sup>3</sup>	long-term inhalative (systemic)	Assessment factor 5, repeated dose toxicity.

\* **PNEC**

CAS No.	Substance name	PNEC Value	PNEC type	Remark
57-55-6	Propane-1,2-diol	26 mg/L	aquatic, marine water	Assessment factor 500
57-55-6	Propane-1,2-diol	50 mg/kg dw	soil	
57-55-6	Propane-1,2-diol	57.2 mg/kg dw	sediment, marine water	
57-55-6	Propane-1,2-diol	183 mg/L	aquatic, intermittent release	
57-55-6	Propane-1,2-diol	260 mg/L	aquatic, freshwater	Assessment factor 50, assessment factor.
57-55-6	Propane-1,2-diol	572 mg/kg dw	sediment, freshwater	

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CAS No.	Substance name	PNEC Value	PNEC type	Remark
57-55-6	Propane-1,2-diol	20000 mg/L	sewage treatment plant (STP)	Assessment factor 1

\* **8.2 Exposure controls**\* **Personal protection equipment****Eye/face protection**

Protective goggles according to EN 166, in case of increased risk add protective face shield.

**Hand protection**

Safety gloves according to EN 374:

Glove material specification [make/type, thickness, permeation time/life]: IIR, >= 0,7 mm, > 480 min

**Body protection:**

Safety shoes with steel toecap.

Body covering work clothing or chemical resistant suit at increased risk.

\* **Respiratory protection**

Respiratory protection necessary at:

high concentrations

Suitable respiratory protection apparatus:

Short term: filter apparatus, filter A

\* **Environmental exposure controls**\* **Remark**

Prevent release to the environment.

\* **SECTION 9: Physical and chemical properties**\* **9.1 Information on basic physical and chemical properties****Physical state**

liquid

**Colour**

green

**Odour**

perceptible

**Safety relevant basis data**

	Value	Method	Source, Remark
Odour threshold:			not determined
Melting point/freezing point	-32- -10 °C	ASTM D 1177	
Boiling point or initial boiling point and boiling range	approx. 102- 106 °C pressure 1013 hPa	ASTM D1120	
flammability			none
Lower and upper explosion limit			not determined
Flash point		DIN 51758	none
Auto-ignition temperature			not applicable
Decomposition temperature	> 200 °C	DSC	
pH	approx. 8 (20°C)	DIN 51369	
Viscosity	kinematic 2.4- 6.3 mm²/s (20°C)	DIN 51562	
Solubility(ies)	Water solubility (20°C)		miscible
Partition coefficient n-octanol/water (log value)			not applicable
Vapour pressure	< 0.1 hPa (20°C)	calculated	

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	Value	Method	Source, Remark
Density and/or relative density	1.021- 1.039 g/cm <sup>3</sup> (20°C)	DIN 51757	
Relative vapour density			not determined
particle characteristics			not applicable

**\* 9.2 Other information**

No data available

**\* SECTION 10: Stability and reactivity****10.1 Reactivity**

See section "Possibility of hazardous reactions".

**\* 10.2 Chemical stability**

The mixture is chemically stable under recommended conditions of storage, use and temperature.

**10.3 Possibility of hazardous reactions**

Reactions with oxidising agents.

**10.4 Conditions to avoid**

Heat sources / heat - risk of bursting.  
 Sources of ignition.

**\* 10.5 Incompatible materials**

Oxidising agent

**10.6 Hazardous decomposition products**

When handled and stored appropriately, no dangerous decomposition products are known.

**\* SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****\* Acute toxicity****\* Animal data**

	Effective dose	Method, Evaluation	Source, Remark
Acute oral toxicity	CAS No.57-55-6 Propane-1,2-diol LD50: 22000 mg/kg Species Rat		
Acute dermal toxicity	CAS No.57-55-6 Propane-1,2-diol LD50: > 2000 mg/kg Species Rabbit		
Acute inhalation toxicity	CAS No.57-55-6 Propane-1,2-diol Acute inhalation toxicity (vapour) LC50: > 100000 ppm Species Rabbit Exposure time 2 h		

**\* Assessment/classification**

Based on available data, the classification criteria are not met.

**\* Skin corrosion/irritation**

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**Animal data**

Result / Evaluation	Method	Source, Remark
non-irritant. Species Rabbit	OECD 404	Information concerns Propane-1,2-diol.

- \* **Assessment/classification**  
 Based on available data, the classification criteria are not met.

\* **Serious eye damage/irritation****Animal data**

Result / Evaluation	Method	Source, Remark
non-irritant. Species Rabbit	OECD 405	Information concerns Propane-1,2-diol.

- \* **Assessment/classification**  
 Based on available data, the classification criteria are not met.

**Sensitisation to the respiratory tract**

**Assessment/classification**  
 Study scientifically not necessary.

\* **Skin sensitisation****Animal data**

Result / Evaluation	Dose / Concentration	Method	Source, Remark
not sensitising.	Species Guinea pig	OECD 406	Information concerns Propane-1,2-diol.

- \* **Assessment/classification**  
 Based on available data, the classification criteria are not met.

\* **Repeated dose toxicity (subacute, subchronic, chronic)**

	Effective dose	Method	Specific effects:	Organs affected:	Source, Remark
Subchronic inhalation toxicity	NOAEC 1000-2200 mg/m <sup>3</sup> Species Rat				Information concerns Propane-1,2-diol.
Chronic oral toxicity	NOAEL 1700-2100 mg/kg bw/day Species Rat				Information concerns Propane-1,2-diol.

- \* **Additional information**  
 Based on available data, the classification criteria are not met.

\* **Germ cell mutagenicity**

	Value	Method	Result / Evaluation	Remark
In vitro mutagenicity/genotoxicity			negative	Information concerns Propane-1,2-diol.
In vivo mutagenicity/genotoxicity			negative	Information concerns Propane-1,2-diol.

- \* **Assessment/classification**  
 Based on available data, the classification criteria are not met.

\* **Carcinogenicity**

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**Animal data**

	Value	Method	Result / Evaluation	Remark
Carcinogenicity	oral 1700- 2100 mg/kg Species rat (male/female) Exposure duration 2 a			Information concerns Propane-1,2-diol.

\* **Assessment/classification**  
 Based on available data, the classification criteria are not met.

**\* Reproductive toxicity****Animal data**

	Value	Method	Result / Evaluation	Remark
Reproductive toxicity	NOAEL(C): 10100 mg/kg Species Mouse			Information concerns Propane-1,2-diol.

\* **Assessment/classification**  
 Based on available data, the classification criteria are not met.

**\* STOT-single exposure****\* STOT SE 1 and 2**

\* **Assessment/classification**  
 Based on available data, the classification criteria are not met.

**\* STOT-repeated exposure**

\* **Assessment/classification**  
 Based on available data, the classification criteria are not met.

**\* Aspiration hazard**

\* **Assessment/classification**  
 Based on available data, the classification criteria are not met.

**11.2 Information on other hazards**

No data available

**Other information**

The product has not been tested. The information is derived from the properties of the individual components.

**\* SECTION 12: Ecological information****\* 12.1 Toxicity****\* Aquatic toxicity**

	Effective dose	Method, Evaluation	Source, Remark
Acute (short-term) fish toxicity	LC50: 40613 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 96 h		Information concerns Propane-1,2-diol.
Chronic (long-term) fish toxicity	not determined		
Acute (short-term) toxicity to crustacea	LC50 18340 mg/L Species Ceriodaphnia spec Test duration 96 h	OECD 202	Information concerns Propane-1,2-diol.
Chronic (long-term) toxicity to aquatic invertebrate	not determined		
Acute (short-term) toxicity to algae and cyanobacteria	EC50 24200 mg/L Species Pseudokirchneriella subcapitata Test duration 72 h	OECD 201	Information concerns Propane-1,2-diol.



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	Effective dose	Method, Evaluation	Source, Remark
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	not determined		
Toxicity to other aquatic plants/organisms	not determined		
Toxicity to microorganisms	NOEC > 2000 mg/L Species <i>Pseudomonas putida</i> Test duration 18 h		Information concerns Propane-1,2-diol.

**\* 12.2 Persistence and degradability**

	Value	Method	Source, Remark
Biodegradation	Degradation rate 98.3 % Test duration 28 d	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	CAS No.57-55-6 Propane-1,2-diol

**\* Assessment/classification**  
 Readily biodegradable (according to OECD criteria).

**\* 12.3 Bioaccumulative potential**

	Value	Method	Source, Remark
Bioconcentration factor (BCF)	Bioconcentration factor (BCF) 0.09	calculated	CAS No.57-55-6 Propane-1,2-diol

**\* Assessment/classification**  
 Based on the n-octanol/water partition coefficients of the individual components of the mixture, accumulation in organisms is not expected.

**\* 12.4 Mobility in soil**

	Value	Distribution	Transport type	Method	Remark
Half-life time in soil	CAS No.57-55-6 Propane-1,2-diol 2.9				KOC value

**12.5 Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**\* 12.6 Endocrine disrupting properties**

	Effective dose	Method, Evaluation	Source, Remark
Endocrine disrupting properties			See section 2.3

**12.7 Other adverse effects****\* Additional ecotoxicological information**

**\* Additional information**  
 The product has not been tested. The data are derived from the individual components of the mixture.

**\* SECTION 13: Disposal considerations****\* 13.1 Waste treatment methods****Waste codes/waste designations according to EWC/AVV**

Waste code product	Waste name
160114 *	antifreeze fluids containing hazardous substances

**\* Appropriate disposal / Product**  
 Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.  
 Prevent release to the environment. No disposal via the sewage.  
 Disposal according to local regulations.

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- \* **Appropriate disposal / Package**  
 Disposal according to local regulations.

**SECTION 14: Transport information**

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
<b>14.1 UN number or ID number</b>	-	-	-
<b>14.2 UN proper shipping name</b>	-	-	-
<b>14.3 Transport hazard class(es)</b>	-	-	-
<b>14.4 Packing group</b>	-	-	-
<b>14.5 Environmental hazards</b>	No	No	No

**14.6 Special precautions for user**

The protective measures listed in Sections 6, 7 and 8 of the Safety Data Sheet have to be considered.

**14.7 Maritime transport in bulk according to IMO instruments**

No carriage in bulk.

**Land transport (ADR/RID)****Remark**

Not classified for this transport carrier.

**Sea transport (IMDG)****Remark**

No hazardous material as defined by the prescriptions.

**Air transport (ICAO-TI / IATA-DGR)****Remark**

No hazardous material as defined by the prescriptions.

\* **SECTION 15: Regulatory information**\* **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**\* **Other regulations (EU)**\* **To follow:**

National and local regulations concerning chemicals shall be observed.

\* **15.2 Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were carried out.

\* **SECTION 16: Other information****Key literature references and sources for data**

Information from our suppliers and data from the "GESTIS Substances Database" and the "Registered Substances" database of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

\* **Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]**

The mixture was classified by the manufacturer.

\* **Additional information**

® registered trademark

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

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**Indication of changes**

\* Data changed compared with the previous version