

Safety Data Sheet

SPINOLOGY Coolant

Rev. date: 28.02.2022

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

according to regulation (EG) Nr. 1907/2006

1.1 Product identifier

Product: SPINOLOGY Coolant

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

Uses advised against: None

Use of the substance/mixture: Heat transfer fluid, cooling brine, antifreeze, corrosion protection agent

1.3 Details of the supplier of the safety data sheet

Company name: SPINOLOGY GmbH
Street: Brunnenweg 17
Place: D-64331 Weiterstadt
Phone: +49 (0) 6150 – 97096 0
Fax: +49 (0) 6150 – 97096 10
Website: www.spinogy.de
E-Mail: mail@spinogy.de
Responsible Department: Marc Schmidt-Winterstein
Tel.: +49 (0) 6150 – 97096 80
msw@spinogy.de

1.4 Emergency telephone number

Number: +49 (0) 6150 – 97096 0 (Mo. to Fr., 8 am to 5 pm)
Responsible: Marc Schmidt-Winterstein
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DE

Print date: 28.02.2022

2.1 Classification of the substance or mixture

SECTION 2: Hazards identification

Regulation (EG) Nr. 1272/2008

Hazard categories:

Acute toxicity: Acute Tox. 4

STOT RE 2

Hazard Statements:

Specific target organ toxicity - repeated exposure:

Harmful if swallowed.

May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

Regulation (EG) Nr. 1272/2008

Signal word:

Piktograms:

Hazard components for labelling Ethanediol, Ethylene glycol

Warning



GHS 07 GHS08

Hazard statements:

H302 Harmful if swallowed.

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

Precautionary statements:

P260 Do not breathe

dust/fume/gas/mist/vapours/spray.

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

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

P330 Rinse mouth.

P314 Get medical advice/attention if you feel unwell.

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

Additional advice on labelling:

The product is labeled in accordance with Regulation (EC) no. 1272/2008 (GHS).

2.3 Other hazards:

According to Regulation (EC) No 1907/2006

(REACH), this product is regarded to be neither PBT nor vPvB.

High risk of slipping due to leakage/spillage of product.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterization:

Mixture of the following substances with non-hazardous admixtures.

Hazardous components:

CAS-No.	Chemical name:			Quantity:
	EG-No.	Index-No.	REACH-No.	
	Classification according to Regulation (EC) No. 1272/2008 [Cl			
107-21-1	Ethanediol, Ethylene glycol			95 - <= 100 %
	203-473-3		01-2119456816-28	
	Acute Tox. 4, STOT RE 2; H302 H373			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Remove contaminated soaked clothing immediately. In the event of persistent symptoms receive medical treatment.

After inhalation:

Move to fresh air in case of accidental inhalation of vapours. In the event of symptoms refer for medical treatment.

After contact with skin:

Wash off immediately with soap and plenty of water. Consult a doctor if skin irritation persists.

After contact with eyes:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical treatment by eye specialist.

After ingestion:

Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Seek medical treatment immediately. Symptoms of poisoning may not occur for

many hours, therefore keep under medical supervision for at least 48 hours.

4.2 Most important symptoms and effects, both acute and delayed

May cause damage to organs through prolonged or repeated exposure. (kidney, oral) Harmful if swallowed.

4.3 Indications of immediate medical attention or special treatment

Treat symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

Unsuitable extinguishing media: Full water jet.

5.2 Special hazards arising from the substance or mixture

Fire may produce: Carbon monoxide and carbon dioxide Under certain fire conditions traces of other toxic substances cannot be excluded. Vapours may form explosive mixture with air.

5.3 Advice for firefighters:

Cool containers at risk with water spray jet. Use breathing apparatus with independent air supply. Wear full protective suit. Suppress escaping gasses/vapours with directed water spray jet.

Additional information:

Collect contaminated fire-fighting water, avoid any release into the sewerage. 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

In case of vapour formation use respirator. Ensure adequate ventilation. Avoid contact with eyes, skin or mucous membrane. Use personal protective clothing.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/ground water.

6.3 Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
Shovel into suitable container for disposal.

6.4 Reference to other sections

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:

Use only in thoroughly ventilated areas. Avoid contact with eyes, skin or mucous membrane. Care for thoroughly room ventilation, if necessary suck off at workplace.

Advice on protection against fire and explosion:

Keep away from sources of ignition - No smoking.
Take measures against electrostatically charging.
Vapours can form an explosive mixture with air.

Further information on handling:

Avoid formation of aerosols. Do not inhale vapour/aerosol. In case of insufficient ventilation, especially in confined areas.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

Store only in original container at cool and aired place.
Keep in a dry place.

Advice on storage compatibility:

Keep away from food, drink and animal feeding stuffs.

Further information on storage conditions:

Keep container tightly closed.

7.3 Specific end use(s):

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

Ethan-1,2-diol (Monoethylene glykol, MEG)

CAS-No.: 107-21-1
EG-No.: 203-473-3

Exposure limit

IOELV European Union (2000/39/EWG)

Ethylene glycol

Long-term value: 52 mg/m³ 20 ml/m³
Short-term value: 104 mg/m³ 40 ml/m³

AGW (Germany) / TRGS 900

Ethandiol

Value: 26 mg/m³ 10 ml/m³
Peak limit: 2(l)
Skin absorption / sensitization: H
Pregnancy group: Y

Ethan-1,2-diol, CAS 107-21-1 / EG No. 203-473-3

DNEL value	Route of exposure	Exposure time	Effect	Value
(Employee)	dermal	Long-term (chronically)	systemic	106 mg/kg/day
	inhalative	Long-term (chronically)	local	35 mg/m ³

Ethan-1,2-diol, CAS 107-21-1 / EG No. 203-473-3

DNEL value	Route of exposure	Exposure time	Effect	Value
(Consumer)	dermal	Long-term (chronically)	systemic	53 mg/kg/day
	inhalative	Long-term (chronically)	local	7 mg/m ³

Ethan-1,2-diol, CAS 107-21-1 / EG No. 203-473-3

PNEC value	Environmental compartment	Type	Value
	Water	Fresh water	10 mg/l
	Water	Sea water	1 mg/l
	Water	Fresh water sediment	20,9mg/l
	Water	AQUA intermittent	10mg/kg
	Soil	-	1,53 mg/kg
	Sewage plant (STP)	-	199,5 mg/l

8.2 Exposure controls

Appropriate engineering controls:

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures:

Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Avoid contact with skin, eyes and clothing. Take off immediately all contaminated clothing.

Eye/face protection:

Tightly fitting goggles (EN 166).
Eye wash bottle with pure water (EN 15154).

Hand protection:

Chemical-resistant gloves (EN 374).
Suitable materials also for extended, direct contact (recommended: protection index 6, corresponding to a permeation rate > 480 minutes according to EN 374):
Nitrile rubber/nitrile latex - NBR (0,35 mm),
Butyl rubber - Butyl (0,5 mm).
Follow the recommendations of the glove manufacturer for breakthrough properties especially for workplace conditions involving mechanical stress and contact duration.

Skin protection:

Long sleeved clothing (EN 368).

Respiratory protection:

No personal respiratory protective equipment normally required. Breathing apparatus in the event of aerosol or mist formation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General information

Physical state:	Liquid
Colour:	Pink
Odour:	Odourless
pH-Value (at 20 °C):	7,3-8,3
Melting point:	-13 °C
Boiling point:	197,4 °C

Flash point:	111 °C
Explosive properties:	The product is not explosive.
Lower explosion limits:	3,2 Vol%
Upper explosion limits:	15,3 Vol%
Ignition temperature:	> 400 °C
Oxidizing properties:	The product is not self-igniting.
Vapour pressure (20 °C):	0,2 hPa
Density:	1,12 g / cm ³
pH-Value 1%:	No data available
Water solubility (20 °C):	Completely miscible
Viscosity, dynamic (20 °C): mm ² /s	16,1 mPa s Viscosity, kinematic (20 °C): 20-30

9.2 Other information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents. In use formation of flammable/explosive vapour-air mixtures possible.

10.4 Conditions to avoid

No decomposition if used as directed.

10.5 Incompatible materials

Chromylchlorid, Zin Oxidizing agents, perchloric acid, alkali hydroxides, chromyl chloride, zinc

10.6 Hazardous decomposition products

Carbon monoxide and carbon dioxide
Carbonyl compounds
Dioxolan compounds

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

Ethan-1,2-diol, CAS 107-21-1 / EG No. 203-473-3:

Acute oral toxicity:	LD 50, Rat	7712 mg/kg
Acute dermal toxicity:	LD50, Mouse	>3500 mg/kg
Acute inhalation toxicity:	LC50, Rat	>2,5 mg/l (6 hours)

Other information:

Acute toxicity:	LD50, Rat, intraperitoneally	5010 mg/kg
	LD50, Rat, subcutaneous	2800 mg/kg
	LD50, Rat, intravenous	3260 mg/kg

Primary irritant effect:

Irritant effect skin:	Light irritation possible.
Irritant effect eye:	Short-term and reversible light irritation possible.
Sensitization:	No sensitizing effect

Severe effects after repeated or prolonged exposure:

May cause damage to organs through prolonged or repeated exposure

SECTION 12: Ecological information

12.1 Toxicity

Ethan-1,2-diol, CAS 107-21-1 / EG No. 203-473-3:

Aquatic toxicity:	Fish (Phimephales promelas), LC50:	7.860 mg/l/96 h
	Daphnia (Daphnia magna), EC50:	74000 mg/l/24 h
	Algae green algae I5, EC50:	>10000 mg/l/7 d
	Onchorhynchus mykiss, LC50:	18500 mg/l/96 h
	Bacteria (activated sludge), EC20:	>1995 mg/l/30 min

12.2 Persistence and degradability

The product has no harmful effect on the environment.
 It is readily biodegraded according to
 OECD 301E / EEC 84/449 C3

Elimination:	> 70% DOC Zahn-Wellens-Test
	> 99% (21 d; mod. Sturm-Test)

Valuation: Readily biodegraded.
CSB: 1,29 g O₂/kg
BSB5: 0,81 g O₂/g
Ratio BSB/CSB: 63%
DOC: 90-100% in 10 Tagen

12.3 Bioaccumulative potential

No bioaccumulation is expected

12.4 Mobility in the soil

No data available.

Ecotoxic effects:

With the appropriate introduction of low concentrations into adapted biological wastewater treatment plants, trouble is not to be expected in the decomposition activity of activated sludge.

General information:

Water hazard class: WHC 1: slightly hazardous for water.

12.5 Results of PBT and vPvB assessment

PBT: Not determined
vPvB: Not determined

12.6 Other adverse effects

Not determined.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Advice on disposal:

Should not be disposed of with household waste. Do not flush into surface water or sanitary sewer system. Where possible recycling is preferred to disposal. The waste code number must be agreed with the disposer / manufacturer / competent authority.

Waste disposal number of waste from residues/unused products:

160508

WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded organic chemicals consisting of or containing hazardous substances; hazardous waste.

Waste disposal number of used product:
160508

WASTES NOT OTHERWISE SPECIFIED IN THE LIST;
gases in pressure containers and discarded chemicals;
discarded organic chemicals consisting of or containing
hazardous substances; hazardous waste.

Waste disposal number of
contaminated packaging:
150102

WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS,
FILTER MATERIALS AND PROTECTIVE CLOTHING NOT
OTHERWISE SPECIFIED; packaging (including
separately collected municipal packaging waste); plastic
packaging

Contaminated packaging:

Empty containers should be taken for local recycling,
recovery or waste disposal. Contaminated packaging
should be emptied as far as possible and after
appropriate
cleansing may be taken for reuse. Packaging that
cannot be cleaned should be disposed of like the
product.

Cleaning agent: Water

SECTION 14: Transport information

Land transport (ADR/RID):

14.1. UN-Nummer

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es)

No dangerous good in sense of this transport regulation.

14.4. Packing group

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN):

14.1. UN-Nummer

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es)

No dangerous good in sense of this transport regulation.

14.4. Packing group

No dangerous good in sense of this transport regulation.

Marine transport (IMDG):

14.1. UN-Nummer

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es)

No dangerous good in sense of this transport regulation.

14.4. Packing group

No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN-Nummer

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es)

No dangerous good in sense of this transport regulation.

14.4. Packing group

No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

No environmentally hazardous

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information 2004/42/EG:

VOC – EU 0,00%

VOC – CH 0,00%

Information according to 2012/18/EU: Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils

according

to the 'juvenile work protection guideline' (94/33/EC)

Water contaminating class (D):

1 - slightly water contaminating

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR:

Accord européen relatif au transport international des marchandises Dangereuses par Route (Agreement

concerning

the international carriage of Dangerous goods by Road)

IMDG-Code:

International Maritime Code for Dangerous Goods

ICAO:

International Civil Aviation Organisation (IATA: The International Air Transport Association)

GHS:

Globally Harmonized System of Classification, Labelling and Packaging of Chemicals

Relevant H and EUH statements
(number and full text):

H302 Harmful if swallowed.

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

Further Information:

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product),

but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)