

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

SPINNER-SPEZIAL-KUEHLFLUESSIGKEIT

Version 4.0

Print Date 12.11.2014

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Trade name : SPINNER-SPEZIAL-KUEHLFLUESSIGKEIT

1.2. Relevant identified uses of the substance or mixture and uses advised againstUse of the
Substance/Mixture : RefigerantUses advised against : At this moment we have not identified any uses advised
against**1.3. Details of the supplier of the safety data sheet**Company : BCD Chemie GmbH
Schellerdamm 16
DE 21079 Hamburg
Telephone : +49 (0)69-40101-71
Telefax : +49 (0)69-40101-34
E-mail address : InfoSDB@bcd-chemie.de
Responsible/issuing
person : Umwelt / Sicherheit**1.4. Emergency telephone number**Emergency telephone : +49 (0)208-7828-0 Available 24h/7d
number**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	Hazard category	Target Organs	Hazard statements
Acute toxicity (Oral)	Category 4	---	H302
Specific target organ toxicity - repeated exposure	Category 2	---	H373

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For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Directive 67/548/EEC or 1999/45/EC	
Hazard symbol / Category of danger	Risk phrases
Harmful (Xn)	R22
Harmful (Xn)	R48/22

For the full text of the R-phrases mentioned in this Section, see Section 16.

Most important adverse effects

- Human Health : See section 11 for toxicological information.
- Physical and chemical hazards : See section 9 for physicochemical information.
- Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

- Hazard symbols :
- Signal word : Warning
- Hazard statements : H302 Harmful if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
- Precautionary statements
- Prevention : P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
- Response : P314 Get medical advice/ attention if you feel unwell.
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
- Disposal : P501 Dispose of contents/ container to an approved waste disposal plant.

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Hazardous components which must be listed on the label:

II • ethanediol

2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical nature : Aqueous mixture of substances listed below with additions in non hazardous concentrations.

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)		Classification (67/548/EEC)
		Hazard class / Hazard category	Hazard statements	
ethanediol				
Index-No. : 603-027-00-1		Acute Tox.4	H302	Harmful; Xn; R22
CAS-No. : 107-21-1		STOT RE2	H373	Harmful; Xn; R48/22
EC-No. : 203-473-3	<= 50			
Registration : 01-2119456816-28-xxxx				

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	: First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.
If inhaled	: Move to fresh air. Keep patient warm and at rest. Consult a physician. If unconscious place in recovery position. In case of shortness of breath, give oxygen. If breathing is irregular or stopped, administer artificial respiration.
In case of skin contact	: Wash off immediately with soap and plenty of water. If symptoms call a physician.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If symptoms call a physician.
If swallowed	: Rinse the mouth and spit the fluids out. Drink plenty of water. Do NOT induce vomiting. Call a physician immediately.

SPINNER-SPEZIAL-KUEHLFLUESSIGKEIT**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms : Inhalation of vapours is irritating to the respiratory system, may cause throat pain and cough. Convulsions, Unconsciousness, Liver disorders, Kidney disorders

Effects : Harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment : Treatment according to the doctor's diagnosis of the patient. Administer approx. 100 ml ethanol 40 % (hard liquor).

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media : water spray, Dry powder, Carbon dioxide (CO₂), Alcohol-resistant foam

Unsuitable extinguishing media : High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : Vapours may form explosive mixtures with air. Fire may cause evolution of: Carbon monoxide, Carbon dioxide (CO₂)

5.3. Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)

Further information : Cool closed containers exposed to fire with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions : Use personal protective equipment. Keep away unprotected persons. Ensure adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin and eyes. Keep away from sources of ignition - No smoking.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If material reaches soil inform authorities responsible for such cases. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

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Methods and materials for containment and cleaning up : Ensure adequate ventilation. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Large spills should be collected mechanically (remove by pumping) for disposal. Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

See section 8 and 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling : Keep container tightly closed. Ensure adequate ventilation, especially in confined areas. Do not breathe gas/fumes/vapour/spray.

Hygiene measures : Take off all contaminated clothing immediately. Avoid contact with skin and eyes. Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in an area equipped with solvent resistant flooring. Keep containers tightly closed in a cool, well-ventilated place. Keep only in the original container.

Advice on protection against fire and explosion : The product is flammable but not readily ignited. Keep away from heat and sources of ignition. Vapours may form explosive mixtures with air. Possible formation of ignitable mixtures in air if heated above flash point and/or if sprayed (atomised).

Further information on storage conditions : Keep away from direct sunlight. Keep away from heat. Avoid moisture.

Advice on common storage : Store away from explosive substances. Materials to avoid
Strong oxidizing agents

German storage class : 10 Combustible liquids

7.3. Specific end use(s)

Note : None known.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

SPINNER-SPEZIAL-KUEHLFLUESSIGKEIT**Component:** ethanediol**CAS-No.**

107-21-1

Other Occupational Exposure Limit Values

TRGS 900, Skin designation:
Can be absorbed through the skin.

TRGS 900, AGW:
10 ppm, 26 mg/m³, (2)
If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).

EU ELV, Short Term Exposure Limit (STEL):
40 ppm, 104 mg/m³
Indicative

EU ELV, Time Weighted Average (TWA):
20 ppm, 52 mg/m³
Indicative

8.2. Exposure controls**Appropriate engineering controls**

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment*Respiratory protection*

Advice : In case of insufficient ventilation, wear suitable respiratory equipment.
Required if vapours or aerosol are released.
Required, if exposure limit is exceeded (e.g. OEL).
In case of intensive or longer exposure use self-contained breathing apparatus.
In case of brief exposure or low pollution use breathing filter apparatus.
Recommended Filter type:
Combination filter: A-P2

Hand protection

Advice : Wear suitable gloves.
The following materials are suitable:
butyl-rubber
Fluorinated rubber
Polyvinylchloride
Nitrile rubber
Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Protective gloves should be replaced at first signs of wear.

SPINNER-SPEZIAL-KUEHLFLUESSIGKEIT*Eye protection*

Advice : Tightly fitting safety goggles

Skin and body protection

Advice : Solvent resistant protective clothing

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
If material reaches soil inform authorities responsible for such cases.
If the product contaminates rivers and lakes or drains inform respective authorities.

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

Form	:	liquid
Colour	:	colourless clear
Odour	:	characteristic
Odour Threshold	:	no data available
pH	:	no data available
Freezing point	:	not determined
Boiling point/boiling range	:	> 100 °C
Flash point	:	> 100 °C
Evaporation rate	:	no data available
Flammability (solid, gas)	:	Formation of explosive air/vapour mixtures is possible.
Upper explosion limit	:	53 %(V)
Lower explosion limit	:	3,2 %(V)
Vapour pressure	:	23 hPa (20 °C)
Relative vapour density	:	no data available
Density	:	1,085 g/cm ³ (20 °C)

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Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Thermal decomposition	:	no data available
Viscosity, dynamic	:	no data available
Explosivity	:	Product is not explosive. Formation of explosive air/vapour mixtures is possible.
Oxidizing properties	:	no data available

9.2. Other information

No further information available.

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

Advice : No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Advice : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air. Incompatible with oxidizing agents.

10.4. Conditions to avoid

Conditions to avoid : Keep away from direct sunlight.Heat, flames and sparks.

10.5. Incompatible materials

Materials to avoid : Strong oxidizing agents

10.6. Hazardous decomposition products

Hazardous decomposition products : Under fire conditions: Carbon dioxide (CO₂), Carbon monoxide

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

SPINNER-SPEZIAL-KUEHLFLUESSIGKEIT**Oral**

Acute toxicity estimate : 1001 mg/kg) (Calculation method)

Inhalation

Acute toxicity estimate : > 20 mg/l (vapour) (Calculation method)

Dermal

For this mixture is no data available.
Please find this information in the listing of the component/components below in the MSDS.

Irritation**Skin**

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

Eyes

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

Sensitisation

Result : No sensitizing effect known.

CMR effects**CMR Properties**

Carcinogenicity : Contains no ingredient listed as a carcinogen

Mutagenicity : Contains no ingredient listed as a mutagen

Reproductive toxicity : Contains no ingredient listed as toxic to reproduction

Specific Target Organ Toxicity**Single exposure**

remark : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

remark : May cause damage to organs through prolonged or repeated exposure.

SPINNER-SPEZIAL-KUEHLFLUESSIGKEIT**Other toxic properties****Repeated dose toxicity**

no data available

Aspiration hazard

No aspiration toxicity classification

Further information

Other relevant toxicity information : Other dangerous properties can not be excluded.

Component:	ethanediol	CAS-No.
		107-21-1

Acute toxicity**Dermal**

|| LD50 : > 3500 mg/kg (mouse)

SECTION 12: Ecological information**12.1. Toxicity**

Component:	ethanediol	CAS-No.
		107-21-1

Acute toxicity**Fish**

|| LC50 : 72860 mg/l (Pimephales promelas; 96 h) (static test)

Toxicity to daphnia and other aquatic invertebrates

|| EC50 : > 100 mg/l (Daphnia magna; 48 h) (OECD Test Guideline 202)

algae

|| EC50 : 6500 - 13000 mg/l (Selenastrum capricornutum; 96 h)

Bacteria

|| EC20 : > 1995 mg/l (activated sludge; 0,5 h) (ISO 8192)

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Information given is based on data obtained from similar substances.

12.2. Persistence and degradability

Component:	ethanediol	CAS-No.
		107-21-1

Persistence and degradability		
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Persistence

Result : (Related to: Water)
non-significant hydrolysis

Biodegradability

Result : 90 - 100 % (activated sludge; Related to: Chemical oxygen demand; Exposure Time: 10 d)(OECD 301 A)

12.3. Bioaccumulative potential

Component:	ethanediol	CAS-No.
		107-21-1

Bioaccumulation		
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Result : Bioaccumulation is not expected.

12.4. Mobility in soil

Component:	ethanediol	CAS-No.
		107-21-1

Mobility		
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Air : The substance will not evaporate into the atmosphere from the water surface.

Soil : Adsorption to solid soil phase is not expected.

12.5. Results of PBT and vPvB assessment

Component:	ethanediol	CAS-No.
		107-21-1

Results of PBT and vPvB assessment		
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Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects**Additional ecological information**

Result : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

- Product : Disposal together with normal waste is not allowed. Do not let product enter drains. Can be incinerated, when in compliance with local regulations.
- Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleaned are to be disposed of in the same manner as the product.
- European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

SPINNER-SPEZIAL-KUEHLFLUESSIGKEIT**14.5. Environmental hazards**

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

WGK (DE) : WGK:1; slightly water endangering; WGK (DE); Self-classification according VwVwS of 17 May 1999, Annex 4

Major Accident Hazard Legislation : Does not fall under the German StörfallV. -

Other regulations : Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

15.2. Chemical Safety Assessment

There is no data available for this product.

SECTION 16: Other information**Full text of R-phrases referred to under sections 2 and 3.**

R22 Harmful if swallowed.

R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

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

Further information

Key literature references and sources for data : Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

SPINNER-SPEZIAL-KUEHLFLUESSIGKEIT

Other information : The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

|| Indicates updated section.