Safety Data Sheet

Concentrated coolant VETROCOOL

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

1.1. Product identifier

Concentrated coolant VETROCOOL

Further trade names

BO 5002829, 5 kg
BO 5002827, 20 kg
BO 5002828, 220 kg

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

Use of the substance/mixture

lubricant assistants

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	BOHLE AG	
Street:	Dieselstr. 10	
Place:	D-42781 Haan	
Telephone:	+49 2129 5568-0	Telefax: +49 2129 5568-282
E-mail:	info@bohle.de	
Contact person:	Dr. Martin Schade	Telephone: +49 2129 5568-300
E-mail:	MSDS@bohle.de	
Internet:	www.bohle.com	
Responsible Department:	Chemie	

Supplier

Company name:	Bohle Ltd
Street:	Fifth Avenue, Tameside Park
Place:	GB-SK14 6PP Dukinfield, Cheshire
Telephone:	0161 342 1100
E-mail:	info@bohle.ltd.uk

1.4. Emergency telephone number:

0344 892 0111
Office hours only.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Regulation (EC) No 1272/2008

Precautionary statements

P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of waste according to applicable legislation.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Corrosion inhibitor
Additive

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
111-46-6	2,2'-oxybisethanol; diethylene glycol			5 - < 10 %
	203-872-2	603-140-00-6		
	Acute Tox. 4; H302			
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine			1 - < 5 %
	203-312-7	603-079-00-5		
	Eye Irrit. 2; H319			
3811-73-2	pyridine-2-thiol 1-oxide, sodium salt; pyrithione sodium; sodium pyrithione			0,1 - < %
	223-296-5	613-344-00-7		
	Acute Tox. 3, Acute Tox. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 2; H331 H311 H302 H315 H319 H317 H372 H400 H411 EUH070			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
111-46-6	203-872-2	2,2'-oxybisethanol; diethylene glycol	5 - < 10 %
	oral: LD50 = 500 mg/kg		
105-59-9	203-312-7	2,2'-(methylimino)diethanol; N-methyldiethanolamine	1 - < 5 %
	dermal: LD50 = 5990 mg/kg; oral: LD50 = 4680 mg/kg		
3811-73-2	223-296-5	pyridine-2-thiol 1-oxide, sodium salt; pyrithione sodium; sodium pyrithione	0,1 - < %
	inhalation: ATE 0,5 mg/l (dusts or mists); dermal: ATE 790 mg/kg; oral: ATE 500 mg/kg Aquatic Acute 1; H400: M=100		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection!
Move out of dangerous area.
Take off all contaminated clothing immediately.

After inhalation

Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.

After contact with skin

Wash off with warm water and soap. If skin irritation persists, call a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. If symptoms persist, call a physician.

After ingestion

Rinse mouth. When in doubt or if symptoms are observed, get medical advice.

4.2. Most important symptoms and effects, both acute and delayed

May cause eye/skin irritation.

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

Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water mist. Foam. dry powder. Carbon dioxide (CO_2).

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Carbon monoxide
nitrogen oxides (NOx)

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Use personal protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

For containment

Large amounts of spillages: Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Small amounts of spillages: Wipe up with absorbent material (eg. cloth, fleece).

For cleaning up

Flush with water.

Other information

Never return spills in original containers for re-use.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection
SECTION 13: Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes.
Handle in accordance with good industrial hygiene and safety practice.
Provide sufficient air exchange and/or exhaust in work rooms.

Advice on protection against fire and explosion

Usual measures for fire prevention.
Co-ordinate fire-fighting measures to the fire surroundings.

Advice on general occupational hygiene

Provide adequate ventilation. Do not breathe vapour/aerosol.
Avoid contact with the skin and the eyes.
Take off contaminated clothing and shoes immediately.
Keep away from food, drink and animal feedingstuffs.
Wash hands before breaks and immediately after handling the product.
When using, do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep containers tightly closed in a cool, well-ventilated place.
Protect from frost, heat and sunlight.
Store in original container.

Hints on joint storage

Do not store near acids.

Further information on storage conditions

10 - 30°C

7.3. Specific end use(s)

lubricant assistants

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
111-46-6	2,2'-Oxydiethanol	23	101		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
111-46-6	2,2'-oxybisethanol; diethylene glycol		
Worker DNEL, long-term	inhalation	systemic	26 mg/m³
Worker DNEL, long-term	dermal	systemic	106 mg/kg bw/day
Worker DNEL, long-term	inhalation	local	60 mg/m³
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine		
Worker DNEL, long-term	dermal	systemic	19 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine
Freshwater	0,1 mg/l
Marine water	0,013 mg/l
Freshwater sediment	0,89 mg/l
Marine sediment	0,11 mg/l

Additional advice on limit values

Even in case of a full release, due to the small amount of substances present, it is not expected that exposure limits will be reached. However it is the duty of the user to verify this and follow given exposure limits at the

workplace.

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Individual protection measures, such as personal protective equipment

Eye/face protection

safety glasses with side-shields conforming to EN166

Hand protection

protective gloves EN ISO 374
nitrile rubber
Butyl caoutchouc (butyl rubber)
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Only wear fitting, comfortable and clean protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.
Recommended Filter type: A-P2.

Environmental exposure controls

Do not allow to enter into surface water or drains.
Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	light yellow
Odour:	characteristic

		Test method
Boiling point or initial boiling point and boiling range:	> 100 °C	
Flammability:	not applicable	
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Flash point:	not applicable	
Auto-ignition temperature:	not applicable	
pH-Value (at 20 °C):	9,5 -10,5	DIN 51369
Viscosity / kinematic: (at 40 °C)	3 - 5 mm²/s	DIN 16896
Water solubility:	soluble	OECD 116
Density (at 20 °C):	1,060-1,080 g/cm³	DIN 51757

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

none

Oxidizing properties

none

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Protect from frost, heat and sunlight.

10.5. Incompatible materials

strong acids and oxidizing agents

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes

Acute toxicity

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

ATEmix calculated

ATE (oral) > 5000 mg/kg; ATE (dermal) > 5000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 12,5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
111-46-6	2,2'-oxybisethanol; diethylene glycol				
	oral	LD50 500 mg/kg			
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine				
	oral	LD50 4680 mg/kg	Rat		
	dermal	LD50 5990 mg/kg	Rabbit		
3811-73-2	pyridine-2-thiol 1-oxide, sodium salt; pyrithione sodium; sodium pyrithione				
	oral	ATE 500 mg/kg			
	dermal	ATE 790 mg/kg			
	inhalation dust/mist	ATE 0,5 mg/l			

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.
Causes skin irritation.
Causes serious eye irritation.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

This information is not available.

SECTION 12: Ecological information

12.1. Toxicity

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

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
111-46-6	2,2'-oxybisethanol; diethylene glycol					
	Acute fish toxicity	LC50 > 32000 mg/l	96 h	Gambusia affinis		
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine					
	Acute fish toxicity	LC50 1000 - 2200 mg/l	96 h	Leuciscus idus		
	Acute algae toxicity	ErC50 37 mg/l	72 h	Desmodesmus subspicatus		
	Acute crustacea toxicity	EC50 233 mg/l	48 h	Daphnia magna		

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

Bioaccumulation is unlikely.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
111-46-6	2,2'-oxybisethanol; diethylene glycol	-1,98 (25°C)
105-59-9	2,2'-(methylimino)diethanol; N-methyldiethanolamine	-1,08

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

This information is not available.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

120110 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; synthetic machining oils; hazardous waste

List of Wastes Code - used product

120109 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; machining emulsions and solutions free of halogens; hazardous waste

SECTION 14: Transport information

Other applicable information

Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2.

Abbreviations and acronyms

Acute Tox. 3: Acute toxicity, hazard category 3
Acute Tox. 4: Acute toxicity, hazard category 4
Skin Irrit. 2: Skin irritation, hazard category 2
Eye Irrit. 2: Eye irritation, hazard category 2
Skin Sens. 1: Skin sensitisation, hazard category 1
STOT RE 1: Specific target organ toxicity - repeated exposure, hazard category 1
Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard category: Chronic 2

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
EUH070	Toxic by eye contact.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)