Safety Data Sheet

according to Regulation (EC) No 1907/2006

Concentrated coolant VETROCOOL low-foaming

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

1.1. Product identifier

Concentrated coolant VETROCOOL low-foaming

Further trade names

BO 5002817, 20 kg
BO 5002818, 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

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:	Klaus Nehren	Telephone: +49 2129 5568-276
e-mail:	MSDS@bohle.de	
Internet:	www.bohle.com	
Responsible Department:	Chemie	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Hazard Statements:
Causes skin irritation.
Causes serious eye irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:

Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statements

P260	Do not breathe vapour / Aerosol.
P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Corrosion inhibitor
Additive

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
10049-36-2	Orthoboric acid, compound with 2,2',2''-nitrilotriethanol			15-20 %
	233-175-9		01-2120763507-48	
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
82801-62-5	Sebacic acid, compound with 2-aminoethanol			7-10 %
	280-045-2			
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
10043-35-3	Boric acid			2-2,5 %
	233-139-2	005-007-00-2	01-2119486683-25	
	Repr. 1B; H360FD			

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

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

Move to fresh air.
If symptoms persist, call a physician.

After contact with skin

Wash off with soap and water.
If symptoms persist, call a physician.

After contact with eyes

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Call a physician immediately.

After ingestion

Rinse mouth thoroughly with water.
Do not induce vomiting.
Consult a physician.

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

Causes skin irritation.
Causes serious eye irritation.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

water spray dry powder alcohol-resistant foam carbon dioxide (CO2)

Unsuitable extinguishing media

High power water jet

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

Ensure adequate ventilation.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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.

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.
Store in original container.
Store in a place accessible by authorized persons only.
Protect from frost, heat and sunlight.

Hints on joint storage

Do not store near acids.

Further information on storage conditions

5 - 40°C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
10043-35-3	Boric acid			
Worker DNEL, long-term		inhalation	systemic	8,3 mg/m³
Worker DNEL, long-term		dermal	systemic	392 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
10043-35-3	Boric acid	
Freshwater		1,35 mg/l
Marine water		1,35 mg/l
Freshwater sediment		1,8 mg/kg
Marine sediment		1,8 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,75 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

Protective and hygiene measures

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.

Eye/face protection

safety glasses with side-shields conforming to EN166

Hand protection

protective gloves DIN EN 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

Chemical protection clothing DIN EN 13034

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:	green
Odour:	slight

		Test method
pH-Value (at 20 °C):	9,5	
Changes in the physical state		
Melting point:	-8 °C	
Initial boiling point and boiling range:	> 100 °C	
Flash point:	not applicable	
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Ignition temperature:	not applicable	
Density (at 20 °C):	1,06 g/cm³	DIN 51757
Water solubility:	completely miscible	
Viscosity / dynamic: (at 20 °C)	3 mPa·s	DIN 54453
Viscosity / kinematic: (at 20 °C)	6 mm²/s	

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

Exothermic reaction with strong acids.

10.4. Conditions to avoid

Protect from frost, heat and sunlight.

10.5. Incompatible materials

strong acids and oxidizing agents
Nitrous acid and other nitrosating agents

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
10043-35-3	Boric acid				
	oral	LD50 3500-4100 mg/kg	Rat		
	dermal	LD50 2000 mg/kg	Rabbit		
	inhalation (4 h) aerosol	LC50 2120 mg/l	Rat		

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
10043-35-3	Boric acid					
	Acute fish toxicity	LC50 79,7 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute crustacea toxicity	EC50 133 mg/l	48 h	Daphnia magna (Big water flea)		
	Fish toxicity	NOEC 1,8 mg/l	34 d	Brachydanio rerio (zebra-fish)		
	Crustacea toxicity	NOEC 6-13 mg/l	21 d	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	(17,5 mg/l)	3 h			

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
10043-35-3	Boric acid	-1,09

12.4. Mobility in soil

No data available

Further information

slightly water endangering

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation.

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

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):

Boric acid

Restrictions on use (REACH, annex XVII):

Entry 30: Boric acid

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.

Further Information

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

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