

according to Regulation (EC) No 1907/2006

VELIND Kühlerfrostschutzkonzentrat

Revision date: 19.05.2017

Product code: 31361

Page 1 of 10

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

VELIND Kühlerfrostschutzkonzentrat

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

Anti-freezing agent

Uses advised against

No information available. Use(Usage) exclusively according to labelled intended purpose!

1.3. Details of the supplier of the safety data sheet

Company name:	VELIND Aerosol GmbH	
Street:	Passower Chaussee 111	
Place:	D-16303 Schwedt/O	
Telephone:	+49 33 32 / 4 50 88 - 0	Telefax: +49 33 32 / 4 50 88 - 30
e-mail:	info@velind.de	
Contact person:	Witt	Telephone: 18
e-mail:	qs@velind.de	
Internet:	www.velind.de	
Responsible Department:	QS	

1.4. Emergency telephone

Emergency Poison Center / GGIZ der Länder Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt und Thüringen: +49 3 61 / 7 30 73 -0

number:**Further Information**Emergency - Phonecalls to +49 (0) 33 32 / 4 50 88 16
(during office-hours from 8.00 a.m. to 4.00 p.m.)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Acute toxicity: Acute Tox. 4

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:

Harmful if swallowed.

May cause damage to organs through prolonged or repeated exposure.

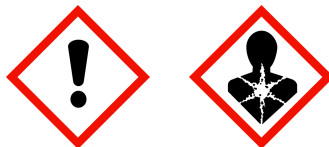
2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

ethanediol, ethylene glycol

disodium tetraborate pentahydrate; borax pentahydrate

Signal word:

Danger

Pictograms:**Hazard statements**

H302

Harmful if swallowed.

H373

May cause damage to organs (kidneys) through prolonged or repeated exposure.

according to Regulation (EC) No 1907/2006

VELIND Kühlerfrostschutzkonzentrat

Revision date: 19.05.2017

Product code: 31361

Page 2 of 10

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P264	Wash hands thoroughly after handling.
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.
P501	Dispose of the Contents/container of waste according to with local/national regulations applicable legislation.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
107-21-1	ethanediol, ethylene glycol			95 - < 100 %
	203-473-3	603-027-00-1	01-2119456816-28	
	Acute Tox. 4, STOT RE 2; H302 H373			
12179-04-3	disodium tetraborate pentahydrate; borax pentahydrate			1 - < 5 %
	215-540-4			
	Repr. 1B, Eye Irrit. 2; H360FD H319			

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

Further Information

List substance (Regulation (EC) No. 1272/2008, Annex VI, part 3) : Dinatriumtetraborat

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately. First aider: Pay attention to self-protection! Move victim out of danger zone.

After inhalation

When in doubt or if symptoms are observed, get medical advice. Provide fresh air. Move victim out of danger zone. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

Wash with plenty of water. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary. After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist. In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Induce vomiting when the affected person is not unconscious. Medical treatment necessary. Rinse mouth thoroughly with water. Do NOT induce vomiting. Call a physician immediately.

according to Regulation (EC) No 1907/2006

VELIND Kühlerfrostschutzkonzentrat

Revision date: 19.05.2017

Product code: 31361

Page 3 of 10

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

The following symptoms may occur::

Intoxication. unconsciousness. Headache. drowsiness. vomiting. Dizziness. Depression of the central nervous system.

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

Treat symptomatically. This information is not available.

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

Co-ordinate fire-fighting measures to the fire surroundings. alcohol resistant foam. Carbon dioxide (CO₂).
Water spray. dry extinguishing powder. Water fog.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Special exposure hazards arising from the substance itself, combustion products, resulting gases: Carbon monoxide Carbon dioxide.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Special protective equipment for firefighters In case of fire: Wear self-contained breathing apparatus.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Remove according to the regulations.

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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. Wear personal protection equipment. Keep away from sources of ignition - No smoking.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Provide fresh air. Retain contaminated washing water and dispose it. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Ventilate affected area. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed containers for disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

See protective measures under point 7 and 8.

according to Regulation (EC) No 1907/2006

VELIND Kühlerfrostschutzkonzentrat

Revision date: 19.05.2017

Product code: 31361

Page 4 of 10

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Do not breathe gas/fumes/vapour/spray. When using do not eat, drink, smoke, sniff. Keep out of the reach of children. Keep away from hot surfaces. Prolonged/repetitive skin contact may cause skin defatting or dermatitis. Read label before use. Observe in addition any national regulations!

Advice on protection against fire and explosion

Protect from sunlight. Store in a well-ventilated place. Keep only in the original container in a cool, well-ventilated place. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Maximum storage temperature: 30°C Further information concerning storage conditions: The floor should be leak tight, jointless and not absorbent. Ensure adequate ventilation of the storage area.

Advice on storage compatibility

Keep away from: Oxidizing agents. strong alkalis. Strong acid.

Further information on storage conditions

Fire class: B

7.3. Specific end use(s)

Anti-freezing agent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
107-21-1	ethanediol, ethylene glycol			
	Worker DNEL, long-term	inhalation	local	35 mg/m ³
	Worker DNEL, long-term	dermal	systemic	106 mg/kg bw/day
	Consumer DNEL, long-term	inhalation	local	7 mg/m ³
	Consumer DNEL, long-term	dermal	systemic	53 mg/kg bw/day

according to Regulation (EC) No 1907/2006

VELIND Kühlerfrostschutzkonzentrat

Revision date: 19.05.2017

Product code: 31361

Page 5 of 10

PNEC values

CAS No	Substance	Value
107-21-1	ethanediol, ethylene glycol	
Freshwater		10 mg/l
Marine water		1 mg/l
Freshwater sediment		20,9 mg/kg
Micro-organisms in sewage treatment plants (STP)		199,5 mg/l
Soil		1,53 mg/kg

Additional advice on limit values

Take precautionary measures against static discharges.

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation as well as local exhaustion at critical locations. Exposure controls / Personal protection equipment

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. When using do not eat, drink, smoke, sniff. Personal protection equipment. Contaminated work clothing should not be allowed out of the workplace. Technical ventilation of workplace.

Eye/face protection

Wear eye protection/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. 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. Tested protective gloves are to be worn: The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. 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.

Suitable material: NBR (Nitrile rubber). Butyl rubber.

Thickness of glove material: 0,7mm

Breakthrough times and swelling properties of the material must be taken into consideration.

Protect skin by using skin protective cream. Set out skin protection guidelines.

Apply skin care products after work.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection necessary at: exceeding exposure limit values. Filtering device (full mask or mouthpiece) with filter:

Environmental exposure controls

No information available.

according to Regulation (EC) No 1907/2006

VELIND Kühlerfrostschutzkonzentrat

Revision date: 19.05.2017

Product code: 31361

Page 6 of 10

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	blue
Odour:	characteristic

Test method

pH-Value:	not determined
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Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	170 °C
Flash point:	111 °C

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

not explosive. In use, may form flammable/explosive vapour-air mixture.

Lower explosion limits:	3,2 vol. %
Upper explosion limits:	53 vol. %
Ignition temperature:	not determined

Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not determined
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Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
Density:	1,126 g/cm ³
Bulk density:	not applicable
Water solubility:	easily soluble

Solubility in other solvents

not determined

Partition coefficient:	not determined
Viscosity / dynamic:	not determined
Vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

Solid content:	not determined
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SECTION 10: Stability and reactivity

10.1. Reactivity

The product has not been tested.

10.2. Chemical stability

Stable with proper storage and handling.

according to Regulation (EC) No 1907/2006

VELIND Kühlerfrostschutzkonzentrat

Revision date: 19.05.2017

Product code: 31361

Page 7 of 10

10.3. Possibility of hazardous reactions

No decomposition if used as intended

10.4. Conditions to avoid

Refer to chapter 7.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Take precautionary measures against static discharges.

10.5. Incompatible materials

Refer to chapter 7.
Materials to avoid: Oxidizing agents.

10.6. Hazardous decomposition products

Refer to chapter 5.
No decomposition if used as intended
In case of fire may be liberated: Carbon monoxide. Carbon dioxide.
Thermal decomposition can lead to the escape of irritating gases and vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

Mixture not tested. There are no data available on the preparation/mixture itself.

Acute toxicity

Harmful if swallowed.
There are no data available on the mixture itself.

ATEmix tested

	Dose	Species	Source
LD50, oral	500 mg/kg	ATE-Wert akute Tox.	aus Tab. 3.1.2 CLP

ATEmix calculated

ATE (inhalative aerosol) 2,561 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol, ethylene glycol				
	oral	LD50 >2000 mg/kg	Rat		
	dermal	LD50 >2000 mg/kg	Mouse		
	inhalative (4 h) aerosol	LC50 >2,5 mg/l	Rat		

Irritation and corrosivity

Based on available data, the classification criteria are not met.
There are no data available on the mixture itself.

Sensitising effects

Based on available data, the classification criteria are not met.
There are no data available on the mixture itself.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
There are no data available on the mixture itself.

STOT-single exposure

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

STOT-repeated exposure

according to Regulation (EC) No 1907/2006

VELIND Kühlerfrostschutzkonzentrat

Revision date: 19.05.2017

Product code: 31361

Page 8 of 10

May cause damage to organs (kidneys) through prolonged or repeated exposure. ((ethanediol, ethylene glycol))

There are no data available on the mixture itself.

Aspiration hazard

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

Specific effects in experiment on an animal

There are no data available on the mixture itself. No data available

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

Practical experience

Observations relevant to classification

The evaluation based on subjective human observations: May cause drowsiness or dizziness. Headache.

Further information

Mixture not tested. There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

Mixture not tested. There are no data available on the preparation/mixture itself.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
107-21-1	ethanediol, ethylene glycol					
	Acute fish toxicity	LC50 >100 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 >100 mg/l	96 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50 >100 mg/l	48 h	Daphnia magna		
	Fish toxicity	NOEC 15380 mg/l	7 d	Pimephales promelas		
	Crustacea toxicity	NOEC 8590 mg/l	7 d	Ceriodaphnia spec		

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	ethanediol, ethylene glycol	-1,36

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

Further information

Avoid release to the environment. Mixture not tested. There are no data available on the preparation/mixture itself.

according to Regulation (EC) No 1907/2006

VELIND Kühlerfrostschutzkonzentrat

Revision date: 19.05.2017

Product code: 31361

Page 9 of 10

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. The waste codes are recommendations based on the scheduled use of this products. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances.

(2001/118/EC, 2001/119/EC, 2001/573/EC)

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Waste disposal number of used product

070604 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; other organic solvents, washing liquids and mother liquors
Classified as 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

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself. Recommendation: Dispose of waste according to applicable legislation. E.g. Dispose of contents/container to industrial incineration plant. Or: Dispose of this material and its container to hazardous or special waste collection point.
Do not empty into drains.

SECTION 14: Transport information**Land transport (ADR/RID)****Other applicable information (land transport)**

No dangerous good in sense of this transport regulation.

14.6. Special precautions for user

No information available.

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

No data available

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):
disodium tetraborate pentahydrate; borax pentahydrate

Restrictions on use (REACH, annex XVII):

Entry 30: disodium tetraborate pentahydrate; borax pentahydrate

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

Additional information

Labelling for contents according to regulation (EC) No 648/2004, annex 7: No.

National regulatory information

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VELIND Kühlerfrostschutzkonzentrat

Revision date: 19.05.2017

Product code: 31361

Page 10 of 10

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

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

Additional information

VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII
Beschränkungsbedingungen: 3, 30

15.2. Chemical safety assessment

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

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 2,3,4,5,6,7,8,9,10,11,12,13,15,16.

These details refer to the products as it is delivered.

Notice the directions for use on the label.

* Data changed compared with the previous version

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H360FD May damage fertility. May damage the unborn child.

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

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

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 singularly 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.)