

# SAFETY DATA SHEET

## VK AVKALKING

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued 15.10.2020

#### 1.1. Product identifier

Product name VK AVKALKING

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

Use of the substance / preparation Lime scale removal

#### 1.3. Details of the supplier of the safety data sheet

##### Producer

Company name Vest Kontakt AS

Office address Stongsvingen 10

Postal address POSTBOKS 174

Postcode 4296

City ÅKREHAMN

Country Norge

Telephone number +47 52811000

Email [post@vestkontakt.no](mailto:post@vestkontakt.no)

Website [www.vestkontakt.no](http://www.vestkontakt.no)

Enterprise No. 939 866 558

Contact person Magnus Dahle

#### 1.4. Emergency telephone number

Emergency telephone Telephone number: 22 59 13 00  
Description: Norwegian Poison Information Center

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Skin Corr. 1B; H314 Eye Dam. 1; H318
Substance / mixture hazardous properties	Causes severe burns to skin and eyes.
Additional information on classification	See supplementary information (section 16).

## 2.2. Label elements

### Hazard pictograms (CLP)



Composition on the label	Orthophosphoric acid ...%, C9-11 Alcohol ethoxylate, Alkylglucoside
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage.
Precautionary statements	P260 Do not breathe mist/vapours/spray. P280 Wear protective gloves / protective clothing / eye protection / face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / 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. P310 Immediately call a POISON CENTER or doctor / physician.

## 2.3. Other hazards

PBT / vPvB	PBT/vPvB assessment has not been performed.
Environmental effects	Large spills can negatively impact the aquatic environment locally due to an decrease in the pH-value.

## SECTION 3: Composition / information on ingredients

### 3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Orthophosphoric acid ...%	CAS No.: 7664-38-2 EC No.: 231-633-2 Index No.: 015-011-00-6	Skin Corr. 1B; H314;	10 – 30 %	
C9-11 Alcohol ethoxylate	CAS No.: 68439-46-3	Eye Dam. 1; H318	1 – 5 %	
Alkylglucoside	CAS No.: 54549-24-5	Eye Dam. 1; H318	1 – 5 %	
Description of the mixture	Water based solution.			
Remarks, substance	CAS No 7664-38-2 has specific concentration limits: Skin Corr. 1B, H314: C ≥ 25 %			
Substance comments	See section 16 for explanation of hazard statements (H) listed above. For substances without REACH registration number in section 3.2, no information has been provided by the subcontractor or manufacturer.			

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

General	Emergency telephone number: see section 1.4. In case of unconsciousness or severe accidents, call 112.
Inhalation	Rinse nose and mouth with water. Fresh air and rest. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. Get medical attention immediately! Chemical burns must be treated by a physician. Wash contaminated clothes before reuse.
Eye contact	Remove any contact lenses. Promptly rinse eyes with plenty of water (tempered at 20-30°C) for at least 30 minutes. Get medical attention immediately! Transport to physician. Keep on flushing during transport.
Ingestion	Immediately rinse mouth and drink plenty of water (100-200 ml). Never give liquid to an unconscious person. Do not induce vomiting. Get medical attention immediately! Transport to hospital. Bring the safety data sheet.

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

Acute symptoms and effects	<p>Inhalation: Inhalation of vapors may cause severe irritation or burns in the respiratory tract. May cause respiratory irritation. Hoste</p> <p>Eye contact: The chemical is corrosive to the eyes and may cause permanent damage. Symptoms such as strong burning, tearing/watering, redness and blurred vision may occur. In severe cases, there is a risk of visual damage/blindness.</p> <p>Skin contact: Burning pain and severe corrosive skin damage. Forms blisters and can cause ulceration.</p> <p>Ingestion: Causes burns if swallowed. Causes burning sensation in the mouth, throat and esophagus. May cause serious permanent damage.</p>
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### 4.3. Indication of any immediate medical attention and special treatment needed

Other information	Treat symptomatically. Splashes in the eyes and ingestion of more than an insignificant amount requires immediate medical attention.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Improper extinguishing media	Do not use water jet.

### 5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	The chemical is not classified as flammable. When heated, explosive mixtures with air is formed.
Hazardous combustion products	May include, but is not limited to: Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide (CO). Oxides of phosphorous (PO <sub>x</sub> ).

### 5.3. Advice for firefighters

Personal protective equipment	Use compressed air equipment when the chemical is involved in fire. In case of evacuation, an approved protection mask should be used. See also section 8.
Other information	Containers close to fire should be removed immediately or cooled with water. Spill water from fire fighting may be strongly caustic. Extinguishing water must not be discharged into drains.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Beware! The product is corrosive. Provide adequate ventilation. Avoid inhalation of vapours and aerosols and contact with skin and eyes. Use protective equipment as referred to in section 8. In case of spills, beware of slippery floors and surfaces.
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### 6.2. Environmental precautions

Environmental precautionary measures	Do not allow to enter into sewer, water system or soil.
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### 6.3. Methods and material for containment and cleaning up

Clean up	Absorb in vermiculite, dry sand or earth and place into containers. Collect in a suitable container and dispose as hazardous waste according to section 13. Wash the contaminated surface with water.
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### 6.4. Reference to other sections

Other instructions	See also sections 8 and 13.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Handling	Provide adequate ventilation. Avoid inhalation of vapours/spray and contact with skin and eyes. Use protective equipment as referred to in section 8. Beware! The product is corrosive.
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### Protective safety measures

Advice on general occupational hygiene	Wash hands at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke during work. Wash contaminated clothing before reuse.
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### 7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in tightly closed original container. Store in a cool place. Corrosive storage.
Conditions to avoid	Avoid strong heat, heat sources. Frost.

### Conditions for safe storage

Advice on storage compatibility	Keep away from: Strong alkalis. Food and feed.
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### 7.3. Specific end use(s)

Specific use(s)

See section 1.2.

## SECTION 8: Exposure controls / personal protection

### 8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Orthophosphoric acid ...%	CAS No.: 7664-38-2	Limit value (8 h) : 1 mg/m <sup>3</sup>	
Control parameters comments	References (laws/regulations): Norwegian regulation on exposure limits: "FOR-2011-12-06-1358 Forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier)".		

### 8.2. Exposure controls

#### Precautionary measures to prevent exposure

Technical measures to prevent exposure

Provide adequate ventilation. The personal protective equipment must be CE-marked and the latest version of the standards shall be used. The protective equipment and the specified standards recommended below are only suggestions, and should be selected on advice from the supplier of such equipment.

A risk assessment of the work place/work activities (the actual risk) may lead to other control measures. The protection equipment's suitability and durability will depend on application.

#### Eye / face protection

Eye protection equipment

Description: Wear tight-fitting goggles or face shield.  
Reference to relevant standard: EN 166 (Personal eye-protection. Specifications).

Additional eye protection measures

Eye wash facilities shall be available at the work place. Either a fixed eye wash facility connected to the drinking water (preferably warm water) or a portable disposable unit.

#### Hand protection

Suitable gloves type

Neoprene. Nitrile. Polyethylene. Polyvinyl chloride (PVC).

Breakthrough time

Value: &gt; 8 hour(s)

Thickness of glove material

Value: 0,4 mm

Hand protection equipment

Description: Use chemical resistant gloves. The gloves abilities may vary among the different glove manufacturers.  
Reference to relevant standard: EN ISO 374 (Protective gloves against chemicals and micro-organisms). EN 420 (Protective gloves – General requirements and test methods).

Additional hand protection measures

Replace gloves if signs of wear and tear.

#### Skin protection

Recommended protective clothing	Description: Wear appropriate protective clothing to protect against skin contact.
Additional skin protection measures	Emergency shower should be available at the workplace.

## Respiratory protection

Recommended respiratory protection	<p>Description: In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type B/P2).</p> <p>Reference to relevant standard: EN 12083 (Respiratory protective devices. Filters with breathing hoses, (Non-mask mounted filters). Particle filters, gas filters, and combined filters. Requirements, testing, marking). EN 14387 (Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking).</p>
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## Appropriate environmental exposure control

Environmental exposure controls	Do not allow to enter into sewer, water system or soil.
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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless.
Odour	Slight.
Odour limit	Comments: Not determined.
pH	Status: In delivery state Value: ~ 1
Melting point / melting range	Comments: Not relevant.
Boiling point / boiling range	Value: ~ 100 °C
Flash point	Comments: Not flammable.
Evaporation rate	Comments: Not determined.
Flammability (solid, gas)	Not relevant, see flash point.
Explosion limit	Comments: The product is not explosive.
Vapour pressure	Comments: Not relevant.
Vapour density	Comments: No data recorded.
Relative density	Comments: Not determined.
Density	Value: ~ 1,1 g/cm <sup>3</sup>
Solubility	Medium: Water Comments: Easily soluble.
Partition coefficient: n-octanol/water	Comments: Not relevant for a mixture.
Spontaneous combustibility	Comments: Not relevant.
Decomposition temperature	Comments: Not determined.

Viscosity	Comments: Not determined.
Explosive properties	Not classified as an explosive.
Oxidising properties	Not classified as oxidizing.

## 9.2. Other information

### Other physical and chemical properties

Comments	No further information is available.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	Reactive with the materials listed in Section 10.5.
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### 10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Arise in contact with incompatible materials (see section 10.5) and/or under inappropriate conditions (see section 10.4).
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### 10.4. Conditions to avoid

Conditions to avoid	Avoid freezing. High temperature.
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### 10.5. Incompatible materials

Materials to avoid	Strong alkalis.
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### 10.6. Hazardous decomposition products

Hazardous decomposition products	None under normal conditions. See also section 5.2.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Other information regarding health hazards

Assessment of acute toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of skin corrosion / irritation, classification	Causes severe burns to the skin.
Assessment of eye damage or irritation, classification	Causes serious eye damage.
Assessment of respiratory sensitisation, classification	Based on available data, the classification criteria are not met.

Assessment of skin sensitisation, classification	Based on available data, the classification criteria are not met.
Assessment of germ cell mutagenicity, classification	Based on available data, the classification criteria are not met.
Assessment of carcinogenicity, classification	Based on available data, the classification criteria are not met.
Assessment of reproductive toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - single exposure, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - repeated exposure, classification	Based on available data, the classification criteria are not met.
Assessment of aspiration hazard, classification	Based on available data, the classification criteria are not met.

## Symptoms of exposure

In case of ingestion	May cause burns in mucous membranes, throat, oesophagus and stomach.
In case of skin contact	Corrosive. Forms blisters and can cause ulceration.
In case of inhalation	Inhalation of vapors may cause severe irritation or burns in the respiratory tract.
In case of eye contact	The chemical is severely corrosive to the eyes and may cause permanent damage. Symptoms such as strong burning, tearing/watering, redness and blurred vision may occur. In severe cases, there is a risk of visual damage/blindness.

## SECTION 12: Ecological information

### 12.1. Toxicity

Aquatic toxicity, fish	Toxicity type: Acute Value: 138 mg/l Effect dose concentration : LC50 Test duration: 96 hour(s) Species: <i>Gambusia affinis</i> Comments: Applies to CAS-nr.: 7664-38-2.
	Toxicity type: Acute Value: 420 mg/l Effect dose concentration : LC50 Test duration: 96 hour(s) Species: <i>Oncorhynchus mykiss</i> Comments: Applies to CAS-nr.: 54549-24-5.
	Toxicity type: Acute Value: 1 – 5 mg/l Effect dose concentration : LC50 Test duration: 9 hour(s) Species: <i>Oncorhynchus mykiss</i> Comments: Applies to CAS-nr.: 68439-46-3.



Aquatic toxicity, crustacean	<p>Toxicity type: Acute  Value: 490 mg/l  Effect dose concentration : EC50  Test duration: 48 hour(s)  Species: Daphnia magna  Comments: Applies to CAS-nr.: 54549-24-5.</p> <p>Toxicity type: Acute  Value: 1 – 10 mg/l  Effect dose concentration : EC50  Test duration: 48 hour(s)  Species: Daphnia magna  Comments: Applies to CAS-nr.: 68439-46-3.</p>
Ecotoxicity	The chemical is not classified as harmful to the environment.

## 12.2. Persistence and degradability

Persistence and degradability description/evaluation	There are no data available on the chemical itself.
Biodegradability	<p>Value: &gt; 70 %  Method: OECD 301D  Comments: Applies to CAS-nr.: 54549-24-5.  Test period: 28 day(s)</p> <p>Value: &gt; 60 %  Method: OECD 306  Comments: Applies to CAS-nr.: 54549-24-5.  Test period: 28 day(s)</p> <p>Value: &gt; 90 %  Method: OECD 301 B  Comments: Applies to CAS-nr.: 68439-46-3.  Test period: 28 day(s)</p>

## 12.3. Bioaccumulative potential

Bioaccumulation, comments	Information on bioaccumulation is not available for the chemical.
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## 12.4. Mobility in soil

Mobility	Soluble in water.
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## 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	PBT/vPvB assessment has not been performed.
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## 12.6. Other adverse effects

Additional ecological information	Acids cause decreased pH values in the water. A low pH value harms aquatic organisms. Do not allow to enter into sewer, water system or soil.
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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Disposed of as hazardous waste by approved contractor. The waste code (EWC-Code) is intended as a guide. The code must be chosen by the user, if the use differs from the one mentioned below.
EWC waste code	EWC waste code: 060104 phosphoricand phosphorous acid Classified as hazardous waste: Yes
NORSAS	7131 Inorganic peroxides.
Other information	Do not empty into drains.

## SECTION 14: Transport information

Dangerous goods	Yes
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### 14.1. UN number

ADR/RID/ADN	1760
IMDG	1760
ICAO/IATA	1760

### 14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	CORROSIVE LIQUID, N.O.S.
Technical name/Danger releasing substance English ADR/RID/ADN	(Phosphoric acid)
ADR/RID/ADN	CORROSIVE LIQUID, N.O.S.
Technical name/danger releasing substance ADR/RID/ADN	(Phosphoric acid)
IMDG	CORROSIVE LIQUID, N.O.S.
Technical name/danger releasing substance IMDG	(Phosphoric acid)
ICAO/IATA	CORROSIVE LIQUID, N.O.S.
Technical name/danger releasing substance ICAO/IATA	(Phosphoric acid)

### 14.3. Transport hazard class(es)

ADR/RID/ADN	8
Classificaton code ADR/RID/ADN	C9
IMDG	8
ICAO/IATA	8

### 14.4. Packing group

ADR/RID/ADN	III
IMDG	III

ICAO/IATA	III
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#### 14.5. Environmental hazards

IMDG Marine pollutant	No
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#### 14.6. Special precautions for user

Special safety precautions for user	Not relevant.
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#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Transport in bulk (yes/no)	No
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#### Additional information

Hazard label ADR/RID/ADN	8
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Hazard label IMDG	8
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Hazard label ICAO/IATA	8
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#### ADR/RID Other information

Tunnel restriction code	E
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Transport category	3
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Hazard No.	80
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#### IMDG Other information

EmS	F-A, S-B
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### SECTION 15: Regulatory information

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

References (laws/regulations)	<p>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments.</p> <p>Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH Regulation), with later amendments.</p> <p>The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009.</p> <p>Norwegian regulation on waste, 01.06.2004 no. 930, with later amendments.</p>
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#### 15.2. Chemical safety assessment

Chemical safety assessment performed	No
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### SECTION 16: Other information

Supplier's notes	The information contained in this SDS must be made available to all those who handle the product.
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List of relevant H-phrases (Section 2 and 3)	H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.
Additional information	The classification is based on information about the ingredients and with consideration to pH.
Key literature references and sources for data	Suppliers Safety data sheet dated: 06.08.2007.
Abbreviations and acronyms used	PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative EWC: European Waste Code (a code from the EU's common classification system for waste) LC50: Median concentration lethal to 50% of a test population. EC50: The effective concentration of substance that causes 50% of the maximum response ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road RID: The Regulations concerning the International Carriage of Dangerous Goods by Rail ICAO: The International Civil Aviation Organisation IMDG: The International Maritime Dangerous Goods Code IATA: The International Air Transport Association
Information added, deleted or revised	New Safety Data Sheet.
Checking quality of information	This SDS is quality controlled by Kiwa Teknologisk Institutt in Norway, certified according to the Quality Management System requirements specified in ISO 9001:2015.
Version	1
Prepared by	Kiwa Teknologisk Institutt as, Norway by Sharon M. Løver