SAFETY DATA SHEET

Flydende Maskinopvask uden klor til alu 1686-1

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

1.1. Product identifier

▼Trade name

Flydende Maskinopvask uden klor til alu 1686-1

Unique formula identifier (UFI)

VUD8-WNV2-F7F1-DS2G

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

Relevant identified uses of the substance or mixture

PC35 Washing and cleaning products
Restricted to professional users.

Product code (A.I.S.E.)

AISE-P202 / Dishwash product. Automatic process.

Use descriptors (REACH)

Sectors of use	**Description**
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Product category	**Description**
PC 35	Washing and Cleaning Products (including solvent based products)
Process category	**Description**
PROC 1	Anvendelse i lukket proces, ingen sandsynlighed for eksponering.
Environmental release category	**Description**
ERC 8a	Wide dispersive indoor use of processing aids in open systems

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Stadsing A/S
Østre Fælledvej 13
DK-9400 Nørresundby
Denmark
Tel.: +45 7015 3400

E-mail

info@stadsing.dk

Revision

04/06/2024

SDS Version

2.0

Date of previous version

07/05/2024 (1.0)

1.4. Emergency telephone number

Contact the poison hotline: +45 82 12 12 12 (24 hour service)
See section 4 “First aid measures”.

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

2.1. Classification of the substance or mixture

Skin Corr. 1A; H314, Causes severe skin burns and eye damage.
Eye Dam. 1; H318, Causes serious eye damage.

2.2. Label elements

Hazard pictogram(s)

Signal word

Danger

Hazard statement(s)

Causes severe skin burns and eye damage. (H314)

Precautionary statement(s)

General

-

Prevention

Do not breathe vapour/mist. (P260)
Wear face protection/protective gloves/protective clothing. (P280)

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water . (P303+P361+P353)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Immediately call a POISON CENTER/doctor. (P310)

Storage

-

Disposal

Dispose of contents/container in accordance with local regulation
(P501)

Hazardous substances

Potassium hydroxide
Silicid acid, sodium salt

Additional labelling

UFI: VUD8-WNV2-F7F1-DS2G

Labelling of contents according to Detergents Regulation (EC) No 648/2004

5% - 15%
· Polycarboxylates
< 5%
· Phosphonates

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.
This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Potassium hydroxide	CAS No.: 1310-58-3 EC No.: 215-181-3 REACH: 01-2119487136-33xxxx Index No.: 019-002-00-8	5-10%	Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1A, H314	
Silicid acid, sodium salt	CAS No.: 1344-09-8 EC No.: 215-687-4 REACH: 01-2119448725-31-0011 Index No.:	5-10%	Skin Irrit. 2, H315 Eye Dam. 1, H318 (SCL: 10.00 %) STOT SE 3, H335	
2-phosphonobutane-1,2,4-tricarboxylic acid	CAS No.: 37971-36-1 EC No.: 253-733-5 REACH:	1-3%	Met. Corr. 1, H290 Eye Irrit. 2, H319	

Index No.:	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

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SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Flush exposed area with water for a long time - at least 30 minutes. It may be necessary to flush for several hours. Use a comfortable water temperature (20-30 °C). Contact Poison Information/doctor/hospital for further advice on follow-up and treatment.
Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting unless this is recommended by a doctor. Hold head facing down to prevent vomit from returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable.

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

Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

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

IF exposed or concerned:
Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:
Carbon oxides (CO / CO2)
Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the chemical emergency services on 72 85 20 00 (24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid direct contact with spilled substances.
Ensure adequate ventilation, especially in confined areas.
Contaminated areas may be slippery.

6.2. Environmental precautions
Avoid discharge to lakes, streams, sewers, etc.
Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up
Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections
See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Avoid direct contact with the product.
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material
Keep only in original packaging.

Storage conditions
0 - 40°C

Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)
This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Potassium hydroxide
Long term exposure limit (8 hours) (mg/m^3): 2
Short term exposure limit (15 minutes) (mg/m^3): 2

Statutory order 291 on exposure limits for substances and mixtures (19/03/2024)

DNEL
2-phosphonobutane-1,2,4-tricarboxylic acid

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	4,2 mg/kg/bw/day
Short term – Systemic effects - Workers	Dermal	80 mg/kg/bw/day
Long term – Systemic effects - Workers	Inhalation	15 mg/m3
Short term – Systemic effects - Workers	Inhalation	158 mg/m3

PNEC
2-phosphonobutane-1,2,4-tricarboxylic acid

Route of exposure:	Duration of Exposure:	PNEC:
Activated Sludge Plant		50,4 mg/l

Freshwater	3,33 mg/l
Freshwater sediment	1,47 mg/kg
Intermittent release	10,42 mg/l
Marine water	0,33 mgl
Soil	0,491 mg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.
Ensure that eyewash stations and safety showers are located within easy reach.
Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
No special when used as intended.			

Skin protection

Work situation	Recommended	Type/Category	Standards	
When there is risk of splash- / intermittent exposure	Dedicated work clothing should be worn.	-	-	

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0,3	> 240	EN374-2, EN374-3, EN388	
Neoprene (Neoprene)	0.38	> 60	EN374-2, EN374-3, EN388	
Butyl	0.3	> 60	EN374-2, EN374-3, EN388	
-	-	-	-	

Eye protection

Type	Standards	
Face shield alternatively safety glasses with side shields.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Liquid

Colour
Clear

Odour / Odour threshold
None

pH
14

Density (g/cm^3)
1.21

Kinematic viscosity
Testing not relevant or not possible due to the nature of the product.

Particle characteristics
Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)
Testing not relevant or not possible due to the nature of the product.

Softening point/range (waxes and pastes) (°C)
Does not apply to liquids.

Boiling point (°C)
Testing not relevant or not possible due to the nature of the product.

Vapour pressure
Testing not relevant or not possible due to the nature of the product.

Relative vapour density
Testing not relevant or not possible due to the nature of the product.

Decomposition temperature (°C)
Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)
Testing not relevant or not possible due to the nature of the product.

Flammability (°C)
Testing not relevant or not possible due to the nature of the product.

Auto-ignition temperature (°C)
Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)
Testing not relevant or not possible due to the nature of the product.

Solubility

Solubility in water
Completely soluble

n-octanol/water coefficient (LogKow)
Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)
Testing not relevant or not possible due to the nature of the product.

9.2. Other information

Other physical and chemical parameters
No data available.

Oxidizing properties
Testing not relevant or not possible due to the nature of the product.

SECTION 10: Stability and reactivity

10.1. Reactivity
No data available.

10.2. Chemical stability
The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products
Thermal decomposition may produce corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/substance	Potassium hydroxide
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	365 mg/kg ·

Product/substance	Silicid acid, sodium salt
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	> 5000 mg/kg ·

Product/substance	Silicid acid, sodium salt
Species:	Rat
Route of exposure:	Inhalation
Test:	LD50
Result:	1152 - 1349 mg/ kg ·

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>4000 mgkg bw ·

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	> 5 ml/kg bw ·

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	>1979 mg/m3 air ·

Skin corrosion/irritation
Causes severe skin burns and eye damage.

Serious eye damage/irritation
Causes serious eye damage.

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

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

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

Long term effects
Tissue-damaging effects: This product contains substances with skin corrosive properties. Inhaled vapour or aerosols may produce adverse effects to lungs, irritations and burns in the respiratory organs as well as coughing. Dermal contact and contact with the eye cause irreversible effects.

Endocrine disrupting properties
This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information
None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	Potassium hydroxide
Species:	Fish
Duration:	48 hours
Test:	LC50
Result:	125 mg/l ·

Product/substance	Potassium hydroxide
Species:	Daphnia
Duration:	96 hours
Test:	EC50
Result:	40-240 mg/l ·

Product/substance	Silicid acid, sodium salt
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	3185 mg/l ·

Product/substance	Silicid acid, sodium salt
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	4857 mgI ·

Product/substance	Silicid acid, sodium salt
Species:	Algae
Duration:	48 hours
Test:	EC0
Result:	>1000 mg/l ·

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	>1042 mg/l ·

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	>1081 mg/l ·

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
Species:	Daphnia
Duration:	24 hours
Test:	EC50
Result:	>1071 mg/l ·

12.2. Persistence and degradability

Product/substance	Silicid acid, sodium salt
Conclusion:	Readily biodegradable

12.3. Bioaccumulative potential

Product/substance	Potassium hydroxide
LogKow:	-3,8800
Conclusion:	No potential for bioaccumulation

Product/substance	Silicid acid, sodium salt
Conclusion:	No potential for bioaccumulation

Product/substance	2-phosphonobutane-1,2,4-tricarboxylic acid
LogKow:	-1,3600
Conclusion:	No potential for bioaccumulation

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste. (*)
HP 8 – Corrosive
Dispose of contents/container to an approved waste disposal plant.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

Waste group H: Waste with low energy content	
20 01 15*	Alkalines

Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	Transport hazard class: 8 Label: 8 Classification code: C5 	II	No	Limited quantities: 1 L Tunnel restriction code: (E) See below for additional information.

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
IMDG	UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	Transport hazard class: 8 Label: 8 Classification code: C5 	II	No	Limited quantities: 1 L EmS: F-A S-B See below for additional information.
IATA	UN3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	Transport hazard class: 8 Label: 8 Classification code: C5 	II	No	See below for additional information.

* Packing group

** Environmental hazards

Additional information

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.
IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.
IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.
This product is within scope of the regulations of transport of dangerous goods.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.
People under the age of 18 shall not be exposed to this product.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

Not applicable.

Labelling of contents according to Detergents Regulation (EC) No 648/2004

5% - 15%
· Polycarboxylates
< 5%
· Phosphonates

▼Product registration number

2034256

Additional information

Not applicable.

Sources

The Danish Working Environment Authority's executive order no. 1049 of 30 May 2021 on young people's work.
Based on Council Directive 94/33 / EC of 22 June 1994 on the protection of young people at work.
Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H290, May be corrosive to metals.
H302, Harmful if swallowed.
H314, Causes severe skin burns and eye damage.
H315, Causes skin irritation.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H335, May cause respiratory irritation.

The full text of identified uses as mentioned in section 1

LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PROC 1 = Anvendelse i lukket proces, ingen sandsynlighed for eksponering.
PC 35 = Washing and Cleaning Products (including solvent based products)
ERC 8a = Wide dispersive indoor use of processing aids in open systems

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

▼The safety data sheet is validated by

alias

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
Country-language: DK-en