SAFETY DATA SHEET

KALKULIN PULVER

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

1.1. Product identifier

Trade name

KALKULIN PULVER

Product no.

6003

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

Relevant identified uses of the substance or mixture

Cleaning agent

Use descriptors (REACH)

Sectors of use	Description
LCS "IS"	Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW"	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Product category	**Description**
PC35	Washing and Cleaning Products (including solvent based products)
Process category	**Description**
PROC13	Treatment of articles by dipping and pouring

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Knud E. Dan A/S
Lunikvej 40
2670 Greve
Denmark
+45 43692422
+45 43690578

Contact person

Lars Bøgeholm

E-mail

lbj@knudedan.dk

Revision

12/14/2022

SDS Version

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

2.1. Classification of the substance or mixture

Skin Corr. 1B; H314, Causes severe skin burns and eye damage.
Eye Dam. 1; H318, Causes serious eye damage.
STOT SE 3; H335, May cause respiratory irritation.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Causes severe skin burns and eye damage. (H314)
May cause respiratory irritation. (H335)

Safety statement(s)

General

-

Prevention

Do not breathe dust. (P260)
Wear eye protection/protective gloves. (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)

Storage

-

Disposal

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

Hazardous substances

disodium metasilicate

Additional labelling

Not applicable.

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.
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
disodium metasilicate	CAS No.: 10213-79-3 EC No.: REACH: 10213-79-3 Index No.: 014-010-00-8	95-100%	Skin Corr. 1B, H314 STOT SE 3, H335	

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

Other information

-

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

< 5%
· Non-ionic surfactants

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.
Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 30 minutes and continue until irritation stops. 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 returning 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

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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:
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 45 90 60 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.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

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.
Minor spills are collected with a cloth. Collection and disposal of the material shall be done with minimum creation of dust. Sweep and collect. Shall be contained in suitable and tightly closed disposal containers.
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.
Powder trickling out onto the floor or onto other containers must be prevented.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

5 - 25 °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

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

disodium metasilicate

Duration	Route of exposure	DNEL
Long term – Systemic effects - General population	Dermal	0,74 mg/kg/dag
Long term – Systemic effects - Workers	Dermal	1,49 mg/kg/dag
Short term – Systemic effects	Inhalation	6,22 mg/m3

PNEC

disodium metasilicate

Route of exposure	Duration of Exposure	PNEC
Freshwater		7,5 mg/l
Marine water		1 mg/l
Sewage treatment plant		1000 mg/l

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

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

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

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. Always wash hands, forearms and face.

Measures to avoid environmental exposure

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

8.3. Individual protection measures, such as personal protective equipment

Generally

Only CE-marked personal protection equipment should be used.
Use only CE marked protective equipment.

Respiratory Equipment

Type	Class	Colour	Standards
S/SL	P2	White	EN149



Skin protection

Recommended	Type/Category	Standards
Dedicated work clothing should be worn.	-	-



Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	-	-	EN374-2



Eye protection

Work situation	Type	Standards
When there is risk of splash- / intermittent exposure	Safety glasses	EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state
Granulate

Colour
White

Odour / Odour threshold
Characteristic

pH
13

pH in solution
12,5-13 (1-2%)

Density (g/cm³)
2.4

Kinematic viscosity
Does not apply to solids.

Particle characteristics
Testing not relevant or not possible due to the nature of the product.

Phase changes

Melting point/Freezing point (°C)
720,0000000

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

Boiling point (°C)
Not applicable - based on structure

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

Relative vapour density
Does not apply to solids.

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)

Does not apply to solids.

Auto-Ignition (°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.

Lower and upper explosion limit (% v/v)

Does not apply to solids.

Solubility

Solubility in water

Completely soluble

n-octanol/water coefficient

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.

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

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	disodium metasilicate
Test method	
Species	Rat
Route of exposure	Oral
Test	LD50
Result	1152-1350 mg/kg ·
Other information	

Product/substance	disodium metasilicate
Test method	
Species	Rat
Route of exposure	Inhalation
Test	LC50
Result	> 2,06 g/m3 ·
Other information	

Product/substance	disodium metasilicate
Test method	
Species	Rat
Route of exposure	Dermal
Test	LD50
Result	> 5000 mg/kg ·
Other information	

Skin corrosion/irritation

Product/substance	disodium metasilicate

Test method	OECD 404
Species	Rabbit
Duration	No data available.
Result	Adverse effect observed (Corrosive)
Other information	

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Product/substance	disodium metasilicate
Test method	OECD 404
Species	Rabbit
Duration	No data available.
Result	Adverse effect observed (Corrosive)
Other information	

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

Product/substance	disodium metasilicate
Test method	
Species	Mouse
Result	No adverse effect observed (not sensitising)
Other information	

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

May cause respiratory irritation.

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

None known.

Other information

None known.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	disodium metasilicate
Test method	
Species	Daphnia
Compartment	
Duration	96 hours
Test	LD50
Result	1700 mg/l ·
Other information	

Product/substance	disodium metasilicate
Test method	
Species	Fish
Compartment	
Duration	96 hours
Test	LC50
Result	210 mg/l ·

Other information

Product/substance	disodium metasilicate
Test method	
Species	
Compartment	
Duration	48 hours
Test	LOEC
Result	>1000 mg/l ·
Other information	

Product/substance	disodium metasilicate
Test method	
Species	Algae
Compartment	
Duration	72 hours
Test	LD50
Result	>345,4 mg/l ·
Other information	

12.2. Persistence and degradability
No data available.

12.3. Bioaccumulative potential

Product/substance	disodium metasilicate
Test method	
Potential bioaccumulation	No
LogPow	No data available.
BCF	No data available.
Other information	

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties
None known.

12.7. Other adverse effects
None known.

SECTION 13: Disposal considerations

Waste treatment methods
Product is covered by the regulations on hazardous waste.
HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
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

07 06 01*	Aqueous washing liquids and mother liquors
06 02 05*	Other bases

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	UN3262	CORROSIVE SOLID, BASIC, INORGANIC,	Class: 8 Labels: 8	III	No	Limited quantities: 5 kg

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information
		N.O.S. (disodium metasilicate)	Classification code: C6 			Tunnel restriction code: (E) See below for additional information.
IMDG	UN3262	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (disodium metasilicate)	Class: 8 Labels: 8 Classification code: C6 	III	No	Limited quantities: 5 kg EmS: F-A S-B See below for additional information.
IATA	UN3262	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (disodium metasilicate)	Class: 8 Labels: 8 Classification code: C6 	III	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.

Product registration number

109832

Additional information

Code number (1993): 00-4.

Sources

The Danish Working Environment Authority's executive order no. 239 of 6 April 2005 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.
Arbejdstilsynets bekendtgørelse nr. 301 af 13. maj 1993 om fastsættelse af kodenumre med senere ændringer.
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

H314, Causes severe skin burns and eye damage.
H335, May cause respiratory irritation.

The full text of identified uses as mentioned in section 1

LCS "IS" = Industrial uses: Uses of substances as such or in preparations at industrial sites
LCS "PW" = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PROC13 = Treatment of articles by dipping and pouring
PC35 = Washing and Cleaning Products (including solvent based products)

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
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
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
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 are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

lbj

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue 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