

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

1.1. Product identifier

Product form	: Mixture
Product name	: CaluClean F421 alkalische reiniger
UFI	: 7U3F-S51Q-W301-5V43
Product code	: 3010001, 3010210, 3010025, 3010005
Type of product	: Detergent
Product group	: Cleaning product

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

1.2.1. Relevant identified uses

Main use category	: Professional use
Industrial/Professional use spec	: Wide dispersive use
Use of the substance/mixture	: The information given in this MSDS concerns the product and is given on the assumption mentioned in section 1.1, that the product will be used in the manner and for the purposes indicated by the manufacturer.
Use of the substance/mixture	: Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)
Function or use category	: Cleaning/washing agents and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Distributor

Carel Lurvink Logistics B.V.
IJzersteden, 11
NL- 7547 TB Enschede
Nederland
T +31 (0)53-4344343 - F +31 (0)53-4337105
info@carellurvink.nl - www.carellurvink.nl

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 1 H318

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

Adverse physicochemical, human health and environmental effects

Causes serious eye damage.

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger.

Contains :

Isotridecanol, ethoxylated (8 EO)

Hazard statements (CLP) :

H318 - Causes serious eye damage.

Precautionary statements (CLP) :

P280 - Wear eye protection, protective gloves.

P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.

EUH-statements :

EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Butoxydiglycol substance with national workplace exposure limit(s) (IE, GB); substance with a Community workplace exposure limit	CAS-No.: 112-34-5 EC-No.: 203-961-6 EC Index-No.: 603-096-00-8 REACH-no: 01-2119475104-44	5 – 10	Eye Irrit. 2, H319
C9-11 PARETH-6	CAS-No.: 68439-46-3 REACH-no: 02-2119495489-16	1 – 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
Tetrapotassiumpyrophosphate	CAS-No.: 7320-34-5 EC-No.: 230-785-7 REACH-no: 01-2119489369-18	1 – 5	Eye Irrit. 2, H319
Isotridecanol, ethoxylated (8 EO)	CAS-No.: 9043-30-5 EC-No.: 500-027-2 REACH-no: 02-2119552461-55	1 – 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Potassium hydroxide substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01-2119487136-33	0,1 – 1	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Potassium hydroxide	CAS-No.: 1310-58-3 EC-No.: 215-181-3 EC Index-No.: 019-002-00-8 REACH-no: 01-2119487136-33	(0,5 ≤ C < 2) Eye Irrit. 2, H319 (0,5 ≤ C < 2) Skin Irrit. 2, H315 (2 ≤ C < 5) Skin Corr. 1B, H314 (5 ≤ C < 100) Skin Corr. 1A, H314

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: If you feel unwell, seek medical advice.

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

Symptoms/effects after eye contact	: Serious damage to eyes.
------------------------------------	---------------------------

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
------------------------------	--

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide.
--	---

5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
--------------------------------	--

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
----------------------	---

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store in a well-ventilated place. Keep cool.
Storage temperature	: 10 – 30 °C
Storage area	: Store in a clean, dry, fire resistant area. Ensure that there is a suitable ventilation system.
Special rules on packaging	: Store in a closed container. Keep only in original container.

7.3. Specific end use(s)

Carefully comply with the instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Butoxydiglycol (112-34-5)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-(2-Butoxyethoxy)ethanol
IOEL TWA	67,5 mg/m ³
IOEL TWA [ppm]	10 ppm
IOEL STEL	101,2 mg/m ³
IOEL STEL [ppm]	15 ppm
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC
Ireland - Occupational Exposure Limits	
Local name	2-(2-Butoxyethoxy)ethanol
OEL TWA [1]	67,5 mg/m ³
OEL TWA [2]	10 ppm
OEL STEL	101,2 mg/m ³
OEL STEL [ppm]	15 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021
United Kingdom - Occupational Exposure Limits	
Local name	2-(2-Butoxyethoxy)ethanol
WEL TWA (OEL TWA) [1]	67,5 mg/m ³
WEL TWA (OEL TWA) [2]	10 ppm
WEL STEL (OEL STEL)	101,2 mg/m ³

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Butoxydiglycol (112-34-5)	
WEL STEL (OEL STEL) [ppm]	15 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Potassium hydroxide (1310-58-3)	
Ireland - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL STEL	2 mg/m ³
Regulatory reference	Chemical Agents Code of Practice 2021
United Kingdom - Occupational Exposure Limits	
Local name	Potassium hydroxide
WEL STEL (OEL STEL)	2 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

DL-Alanine-N,N-diacetic acid trisodium salt (164462-16-2)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	2000 mg/kg bodyweight/day
Acute - systemic effects, inhalation	40 mg/m ³
Acute - local effects, dermal	2000 mg/cm ²
Acute - local effects, inhalation	40 mg/m ³
Long-term - systemic effects, dermal	170 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	40 mg/m ³
Long-term - local effects, inhalation	4 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, dermal	400 mg/kg bodyweight/day
Acute - systemic effects, inhalation	20 mg/m ³
Acute - systemic effects, oral	85 mg/kg bodyweight/day
Acute - local effects, dermal	400 mg/cm ²
Acute - local effects, inhalation	20 mg/m ³
Long-term - systemic effects, oral	17 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	20 mg/m ³
Long-term - systemic effects, dermal	25 mg/kg bodyweight/day
Long-term - local effects, inhalation	2 mg/m ³
PNEC (Soil)	
PNEC soil	2,5 mg/kg dwt

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

C9-11 PARETH-6 (68439-46-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	2080 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	294 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	87 mg/m ³
Long-term - systemic effects, dermal	1250 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,10379 mg/l
PNEC aqua (marine water)	0,10379 mg/l
PNEC aqua (intermittent, freshwater)	0,014 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	13,7 mg/kg dwt
PNEC sediment (marine water)	13,7 mg/kg dwt
PNEC (Soil)	
PNEC soil	1 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1,4 mg/l
Butoxydiglycol (112-34-5)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	≈ 20 mg/kg bodyweight/day
Acute - local effects, inhalation	≈ 101,2 mg/m ³
Long-term - systemic effects, inhalation	≈ 67,5 mg/m ³
Long-term - local effects, inhalation	≈ 67,5 mg/m ³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	≈ 50,6 mg/m ³
Long-term - systemic effects, oral	≈ 1,25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	≈ 34 mg/m ³
Long-term - systemic effects, dermal	≈ 10 mg/kg bodyweight/day
Long-term - local effects, inhalation	≈ 34 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	≈ 1 mg/l
PNEC aqua (marine water)	≈ 0,1 mg/l
PNEC aqua (intermittent, freshwater)	≈ 3,9 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	≈ 4 mg/kg dwt
PNEC sediment (marine water)	≈ 0,4 mg/kg dwt
PNEC (Soil)	
PNEC soil	≈ 0,4 mg/kg dwt

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Butoxydiglycol (112-34-5)	
PNEC (STP)	
PNEC sewage treatment plant	≈ 200 mg/l
Tetrapotassiumpyrophosphate (7320-34-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, inhalation	44,08 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	10,87 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0,05 mg/l
PNEC aqua (marine water)	0,005 mg/l
PNEC aqua (intermittent, freshwater)	0,5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	50 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	2 (> 30 minutes)	0,4	2 (< 1.5)	EN 374-2

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Carefully comply with the instructions for use. Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Appearance	: Clear.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 13
pH solution concentration	: 100 %
Viscosity, kinematic	: < 19,608 mm ² /s
Viscosity, dynamic	: < 20 mPa·s
Solubility	: completely soluble.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1,02 g/ml
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Isotridecanol, ethoxylated (8 EO) (9043-30-5)

LD50 oral	> 500 mg/kg bodyweight
LD50 dermal	> 2000 mg/kg bodyweight

C9-11 PARETH-6 (68439-46-3)

LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 1,6 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)

Butoxydiglycol (112-34-5)

LD50 oral rat	6600 mg/kg
LD50 dermal rabbit	2764 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	> 196 mg/l

Tetrapotassiumpyrophosphate (7320-34-5)

LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:FMC Non-Definitive Dermal Toxicity Protocol (Number 7), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 1,1 mg/l air Animal: rat, Guideline: other:FMC Acute Inhalation Toxicity Protocol Number 27, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: other:US EPA Toxic Substances Health Effect Test Guidelines, October, 1984; (PB82-232984) Acute Inhalation Toxicity Study., Guideline: other:Commission of the European Communities, Council Directive 67/548/EEC, Annex V, Part B.2.; May 1, 1987, Guideline: other:US EPA Pesticide Assessment Guidelines: Subdivision F, Hazard Evaluation: Human and Domestic Animals, Nov, 1984; 81-3 Acute Inhalation Study

Potassium hydroxide (1310-58-3)

LD50 oral	333 mg/kg bodyweight
-----------	----------------------

Skin corrosion/irritation : Not classified
pH: 13

Butoxydiglycol (112-34-5)

pH	7
----	---

Serious eye damage/irritation : Causes serious eye damage.
pH: 13

Butoxydiglycol (112-34-5)

pH	7
----	---

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

C9-11 PARETH-6 (68439-46-3)

NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
----------------------------	---

Tetrapotassiumpyrophosphate (7320-34-5)

NOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
----------------------------	---

Aspiration hazard	: Not classified
-------------------	------------------

CaluClean F421 alkalische reiniger

Viscosity, kinematic	< 19,608 mm ² /s
----------------------	-----------------------------

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

C9-11 PARETH-6 (68439-46-3)

LC50 - Fish [1]	5 – 7 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	2,5 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	1,4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

Butoxydiglycol (112-34-5)

LC50 - Fish [1]	1300 mg/l
EC50 - Other aquatic organisms [1]	1000 mg/l EC50 waterflea (48 h)
EC50 - Other aquatic organisms [2]	100 mg/l IC50 algae (72 h) mg/l

Tetrapotassiumpyrophosphate (7320-34-5)

LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

Potassium hydroxide (1310-58-3)

LC50 - Fish [1]	80 mg/l
-----------------	---------

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.2. Persistence and degradability

CaluClean F421 alkalische reiniger

Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
-------------------------------	---

Butoxydiglycol (112-34-5)

Biodegradation	89 – 93 % OECD 301 C
----------------	----------------------

12.3. Bioaccumulative potential

Butoxydiglycol (112-34-5)

Partition coefficient n-octanol/water (Log Pow)	1
---	---

Tetrapotassiumpyrophosphate (7320-34-5)

Partition coefficient n-octanol/water (Log Pow)	-10,45
---	--------

Potassium hydroxide (1310-58-3)

Partition coefficient n-octanol/water (Log Pow)	0,75
---	------

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Empty containers can be dumped after cleaning according to local legislation. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 20 01 29* - detergents containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Detergent Regulation (648/2004)

Labelling of contents	
Component	%
anionic surfactants, non-ionic surfactants, phosphates	<5%

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Revision date	Modified	
	Flammability (solid, gas)	Added	
	Concentration of the solution used for the pH measurement	Added	
	Supersedes	Modified	
1.1	UFI on SDS 1.1	Added	
1.2	Main use category	Modified	
4.1	First-aid measures after skin contact	Added	
4.1	First-aid measures after ingestion	Modified	
5.1	Suitable extinguishing media	Modified	
6.3	Methods for cleaning up	Added	
6.4	Reference to other sections (8, 13)	Modified	
7.2	Storage area	Modified	
9.1	Melting point	Added	
16	Abbreviations and acronyms	Modified	

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
EC-No.	European Community number
EN	European Standard
OEL	Occupational Exposure Limit
ThOD	Theoretical oxygen demand (ThOD)
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
ED	Endocrine disrupting properties

Data sources

: 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

: None. **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

CaluClean F421 alkalische reiniger

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
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.
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Eye Dam. 1	H318	Annex VI reference classification

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.