CaluClean K20 vaatwasmiddel

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Reference number: 102141
Issue date: 15.02.2017 Revision date: 16.08.2023 Supersedes version of: 01.02.2021 Version: 3.1

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	CaluClean K20 vaatwasmiddel
UFI	:	YRCF-A5J8-230K-18R1
Product code	:	3056010
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]

Corrosive to metals, Category 1	H290
Skin corrosion/irritation, Category 1, Sub-Category 1A	H314
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

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

Adverse physicochemical, human health and environmental effects

May be corrosive to metals. Causes severe skin burns and eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05

Signal word (CLP) : Danger.

Contains : Potassium hydroxide; Sodium hydroxide; sodium hypochlorite solution

Hazard statements (CLP) : H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P280 - Wear eye protection, protective gloves.
P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a doctor.
P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a doctor.
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.
P390 - Absorb spillage to prevent material damage.

EUH-statements : EUH031 - Contact with acids liberates toxic gas.
EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 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]
Sodium hydroxide substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-2119457892-27	5 – 10	Met. Corr. 1, H290 Skin Corr. 1A, H314
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	5 – 10	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sodium hypochlorite solution	CAS-No.: 7681-52-9 EC-No.: 231-668-3 EC Index-No.: 017-011-00-1 REACH-no: 01-2119488154-34	1 – 5	Met. Corr. 1, H290 Skin Corr. 1B, H314 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
Sodium hydroxide	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-2119457892-27	(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
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
sodium hypochlorite solution	CAS-No.: 7681-52-9 EC-No.: 231-668-3 EC Index-No.: 017-011-00-1 REACH-no: 01-2119488154-34	(5 ≤ C ≤ 100) EUH031

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 general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.

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 : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : Inhalation may cause irritation (cough, short breathing, difficulty in breathing).

Symptoms/effects after skin contact : Burns.

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

Symptoms/effects after ingestion : Burns.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity in case of fire : If the product is involved in a fire, it can release toxic chlorine gases. Corrosive vapours.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. 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

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it.

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. Do not breathe vapours, mist, gas, fume, spray, dust.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Ventilate area.

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.

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

Additional hazards when processed : Contact with acids liberates toxic gas.
Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe vapours, gas, mist, fume, spray, dust. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. 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

Technical measures : Comply with applicable regulations.
Storage conditions : Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store in a well-ventilated place. Keep cool.
Incompatible products : Strong acids. Oxidizing agent.
Incompatible materials : Metals.
Storage temperature : 10 – 30 °C
Information on mixed storage : Keep in a cool place away from (strong) acids.
Storage area : Ensure that there is a suitable ventilation system. Store in a clean, dry, fire resistant area.
Special rules on packaging : Store in a closed container.
Packaging materials : Store always product in container of same material as original container. Do not store in corrodable metal.

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

Potassium hydroxide (1310-58-3)	
Ireland - Occupational Exposure Limits	
Local name	Potassium hydroxide
OEL STEL	2 mg/m³
Regulatory reference	Chemical Agents Code of Practice 2021
United Kingdom - Occupational Exposure Limits	
Local name	Potassium hydroxide
WEL STEL (OEL STEL)	2 mg/m³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Sodium hydroxide (1310-73-2)	
Ireland - Occupational Exposure Limits	
Local name	Sodium hydroxide
OEL STEL	2 mg/m³
Regulatory reference	Chemical Agents Code of Practice 2021
United Kingdom - Occupational Exposure Limits	
Local name	Sodium hydroxide
WEL STEL (OEL STEL)	2 mg/m³
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

Potassium hydroxide (1310-58-3)	
DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	1 mg/m³
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	1 mg/m³

Sodium hydroxide (1310-73-2)	
DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	1 mg/m³
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	1 mg/m³

sodium hypochlorite solution (7681-52-9)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	3,1 mg/m³
Acute - local effects, inhalation	3,1 mg/m³
Long-term - local effects, dermal	0,5 % in mixture
Long-term - systemic effects, inhalation	1,55 mg/m³
Long-term - local effects, inhalation	1,55 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	3,1 mg/m³
Acute - local effects, inhalation	3,1 mg/m³
Long-term - systemic effects,oral	0,26 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1,55 mg/m³
Long-term - local effects, dermal	0,5 % in mixture
Long-term - local effects, inhalation	1,55 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0,21 mg/l
PNEC aqua (marine water)	0,042 mg/l
PNEC aqua (intermittent, freshwater)	0,26 µg/l
PNEC (Oral)	
PNEC oral (secondary poisoning)	11,1 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	0,03 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
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:
Chemical resistant apron. Chemical resistant safety shoes

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 ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:
In case of inadequate ventilation wear respiratory protection.

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
Full face respirator	ABEK, Type P2	Vapour protection	EN 140

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.

Consumer exposure controls:
The product is intended for professional use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	light yellow.
Appearance	:	Clear.
Odour	:	slight chlorine.
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	:	> 100 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	13,8
pH solution concentration	:	100 %
Viscosity, kinematic	:	< 16,667 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	:	1,2 g/cm^3
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

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. metals.

10.6. Hazardous decomposition products

No additional information available

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

Potassium hydroxide (1310-58-3)	
LD50 oral	333 mg/kg bodyweight

sodium hypochlorite solution (7681-52-9)	
LD50 oral rat	1100 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 20000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: other:16 CFR 1500.40

Skin corrosion/irritation : Causes severe skin burns.
pH: 13,8

sodium hypochlorite solution (7681-52-9)	
pH	12,5

Serious eye damage/irritation : Assumed to cause serious eye damage
pH: 13,8

sodium hypochlorite solution (7681-52-9)	
pH	12,5

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

sodium hypochlorite solution (7681-52-9)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
STOT-single exposure : Not classified

sodium hypochlorite solution (7681-52-9)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

CaluClean K20 vaatwasmiddel	
Viscosity, kinematic	< 16,667 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

Potassium hydroxide (1310-58-3)	
LC50 - Fish [1]	80 mg/l

Sodium hydroxide (1310-73-2)	
LC50 - Fish [1]	35 mg/l LC50 96h fish
EC50 - Crustacea [1]	40,4 mg/l Ceriodaphnia spec (48 h)
EC50 - Other aquatic organisms [1]	33 mg/l EC50 waterflea (48 h)

sodium hypochlorite solution (7681-52-9)	
LC50 - Fish [1]	2,1 mg/l
EC50 - Crustacea [1]	141 µg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	35 µg/l Test organisms (species): Ceriodaphnia dubia
EC50 - Other aquatic organisms [1]	0,141 mg/l waterflea
EC50 72h - Algae [1]	0,0365 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0,0183 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

CaluClean K20 vaatwasmiddel	
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.

12.3. Bioaccumulative potential

Potassium hydroxide (1310-58-3)	
Partition coefficient n-octanol/water (Log Pow)	0,75

Sodium hydroxide (1310-73-2)	
Partition coefficient n-octanol/water (Log Pow)	-3,88

sodium hypochlorite solution (7681-52-9)	
Partition coefficient n-octanol/water (Log Pow)	-3,42

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				
UN 3266	UN 3266	UN 3266	UN 3266	UN 3266

ADR	IMDG	IATA	ADN	RID
14.2. UN proper shipping name				
CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide ; Potassium hydroxide ; sodium hypochlorite solution)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide ; Potassium hydroxide ; sodium hypochlorite solution)	Corrosive liquid, basic, inorganic, n.o.s. (Sodium hydroxide ; Potassium hydroxide ; sodium hypochlorite solution)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide ; Potassium hydroxide ; sodium hypochlorite solution)	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide ; Potassium hydroxide ; sodium hypochlorite solution)
Transport document description				
UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide ; Potassium hydroxide ; sodium hypochlorite solution), 8, III, (E)	UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide ; Potassium hydroxide ; sodium hypochlorite solution), 8, III	UN 3266 Corrosive liquid, basic, inorganic, n.o.s. (Sodium hydroxide ; Potassium hydroxide ; sodium hypochlorite solution), 8, III	UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide ; Potassium hydroxide ; sodium hypochlorite solution), 8, III	UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hydroxide ; Potassium hydroxide ; sodium hypochlorite solution), 8, III
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	C5
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	5l
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T7
Portable tank and bulk container special provisions (ADR)	:	TP1, TP28
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Hazard identification number (Kemler No.)	:	80
Orange plates	:	
Tunnel restriction code (ADR)	:	E
EAC code	:	2X
APP code	:	B

Transport by sea

Special provisions (IMDG)	:	223, 274
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001, LP01
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T7
Tank special provisions (IMDG)	:	TP1, TP28
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	A
Stowage and handling (IMDG)	:	SW2
Segregation (IMDG)	:	SG35
Properties and observations (IMDG)	:	Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y841
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	852
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	856
CAO max net quantity (IATA)	:	60L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	8L

Inland waterway transport

Classification code (ADN)	:	C5
Special provisions (ADN)	:	274
Limited quantities (ADN)	:	5 L
Excepted quantities (ADN)	:	E1
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0

Rail transport

Classification code (RID)	:	C5
Special provisions (RID)	:	274
Limited quantities (RID)	:	5L
Excepted quantities (RID)	:	E1
Packing instructions (RID)	:	P001, IBC03, LP01, R001
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T7
Portable tank and bulk container special provisions (RID)	:	TP1, TP28
Tank codes for RID tanks (RID)	:	L4BN
Transport category (RID)	:	3
Special provisions for carriage – Packages (RID)	:	W12
Colis express (express parcels) (RID)	:	CE8
Hazard identification number (RID)	:	80

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)

Detergent Regulation (648/2004)

Labelling of contents	
Component	**%**
chlorine-based bleaching agents, phosphonates	<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**
	Flammability (solid, gas)	Added	
	Concentration of the solution used for the pH measurement	Added	
	Supersedes	Modified	
	Revision date	Modified	
	SDS Ref.	Modified	
1.1	UFI on SDS 1.1	Added	
1.1	Name	Modified	
1.2	Main use category	Modified	
4.1	First-aid measures after inhalation	Modified	
4.1	First-aid measures general	Modified	
4.1	First-aid measures after skin contact	Modified	
4.1	First-aid measures after ingestion	Modified	
4.3	Other medical advice or treatment	Modified	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
5.2	Hazardous decomposition products in case of fire	Modified	
5.2	Reactivity in case of fire	Added	
5.3	Firefighting instructions	Modified	
5.3	Protection during firefighting	Modified	
6.1	Protective equipment	Modified	
6.1	Emergency procedures	Modified	
6.2	Environmental precautions	Modified	
6.3	Methods for cleaning up	Modified	
6.3	Other information	Added	
6.4	Reference to other sections (8, 13)	Modified	
7.1	Precautions for safe handling	Modified	
7.1	Hygiene measures	Modified	
7.2	Packaging materials	Added	
7.2	Storage area	Modified	
7.2	Special rules on packaging	Modified	
7.2	Storage conditions	Modified	
8.2	Environmental exposure controls	Added	
8.2	Consumer exposure controls	Added	
8.2	Appropriate engineering controls	Added	
9.1	Melting point	Added	
10.1	Reactivity	Modified	
10.2	Chemical stability	Added	
10.3	Possibility of hazardous reactions	Modified	
10.4	Conditions to avoid	Modified	
10.6	Hazardous decomposition products	Modified	
13.1	Waste treatment methods	Added	
15.2	Chemical safety assessment	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

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.

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Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
EUH031	Contact with acids liberates toxic gas.
EUH210	Safety data sheet available on request.
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.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
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
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Met. Corr. 1	H290	Calculation method
Skin Corr. 1A	H314	Calculation method
Aquatic Chronic 3	H412	Calculation method

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.