HG headstone cleaner

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 08/12/2022 Revision date: 28/03/2024 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Product name : HG headstone cleaner
UFI : PQE6-VMTM-200A-NHM2
Product code : 215 ART
Type of product : Detergent
Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Consumer use
Function or use category : Heavy duty cleaning products for stone and similar surfaces

1.2.2. Uses advised against

Restrictions on use : All other uses not recommended above

1.3. Details of the supplier of the safety data sheet

Supplier
HG International B.V.
P.J. Oudweg 41
NL 1314 CJ Almere
The Netherlands
T +31 (0)36 54 94 700
safety@hg.eu, www.hg.eu

Distributor
HG UKI LTD
Weston Business Centre
Parsonage Road
UK CM22 6PU Takeley, Essex
United Kingdom
T +44 (0) 1206 822 744
www.hg.eu

1.4. Emergency telephone number

Emergency number : +31 (0)36 54 94 777
Only for medical personnel
Mon-Fri 09:00 AM - 05:00 PM (CEST)

Country/Area	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)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Serious eye damage/eye irritation, Category 1	H318
Hazardous to the aquatic environment – Acute Hazard, Category 1	H400
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

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

Adverse physicochemical, human health and environmental effects

Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05 GHS09

Signal word (CLP) : Danger

Contains : sodium hypochlorite, solution… % Cl active; Sodium hydroxide; caustic soda

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear eye protection, protective gloves.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER, a doctor.
P405 - Store locked up.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH-statements : EUH206 - Warning! Do not use together with other products. May release dangerous gases (chlorine).

Child-resistant fastening : Applicable

Tactile warning : Applicable

2.3. Other hazards

Contains no PBT and/or 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 substances 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	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sodium hypochlorite, solution… % Cl active (Note B)	CAS-No.: 7681-52-9 EC-No.: 231-668-3 EC Index-No.: 017-011-00-1 REACH-no: 01-2119488154-34	4.58865	Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Sodium hydroxide; caustic soda	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-2119457892-27	≥ 1 – < 2	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-(2-dodecoxyethoxy)acetic acid	CAS-No.: 27306-90-7 EC-No.: 608-079-9	≥ 0.1 – < 1	Eye Dam. 1, H318
Sodium octyl sulphate	CAS-No.: 142-31-4 EC-No.: 205-535-5 REACH-no: 01-2119966154-35	≥ 0.1 – < 1	Skin Irrit. 2, H315 Eye Dam. 1, H318

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (Conc. (% w/w))**
sodium hypochlorite, solution… % Cl active	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
Sodium hydroxide; caustic soda	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) Skin Irrit. 2, H315 (0.5 ≤ C < 2) Eye Irrit. 2, H319 (2 ≤ C < 5) Skin Corr. 1B, H314 (5 ≤ C ≤ 100) Skin Corr. 1A, H314

Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: '... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

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. Get medical advice/attention if you feel unwell.

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 after inhalation : No specific data.

Symptoms/effects after skin contact : Redness. Burns.

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

Symptoms/effects after ingestion : No specific data. Burns.

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

In case of skin contact: Diphoterine.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream. Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Contact with combustible material may cause fire. The active ingredient is an oxidizer. May cause fire or explosion; strong oxidiser.

Explosion hazard : Intense heat may cause container to burst.

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

Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide. Sulphur oxides. Metallic oxides. Halogenated compounds.

5.3. Advice for firefighters

Precautionary measures fire : Evacuate area. Stop leak if safe to do so.

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

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

General measures : Do not handle until all safety precautions have been read and understood. Clean up any spills as soon as possible, using an absorbent material to collect it. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Evacuate area. Keep unnecessary and unprotected personnel away from the spillage. Do not touch or walk on the spilled product. Take off contaminated clothing. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

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".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

For containment : Stop leak if safe to do so. Move containers from spill area. Dilute spills with water and mop up. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.

Methods for cleaning up : Take up liquid spill into absorbent material. Approach from upwind. Dilute spills with water and mop up. Absorb remaining liquid with sand or inert absorbent and remove to safe place.

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 disposal of contaminated materials refer to section 13 : "Disposal considerations". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	:	Ensure good ventilation of the work station. Avoid contact with skin, eyes and clothing. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety procedures. 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	:	Keep in a cool, well-ventilated place away from heat.
Storage conditions	:	Store in dry, cool, well-ventilated area. Protect from sunlight. Heat sources. Keep container tightly closed. Keep only in original container. Protect from freezing. Store locked up.
Incompatible materials	:	Acids. Combustible materials.
Storage temperature	:	> 0 – < 30 °C
Special rules on packaging	:	Keep only in original container. Opened containers must be carefully closed and kept upright to avoid leakage.
Packaging materials	:	Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

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

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

sodium hypochlorite, solution… % Cl active (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

sodium hypochlorite, solution… % Cl active (7681-52-9)	
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 µg/l
PNEC aqua (marine water)	0.042 µg/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	4.69 mg/l

Sodium hydroxide; caustic soda (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

8.1.5. Control banding

No additional information available

8.2. Exposure controls

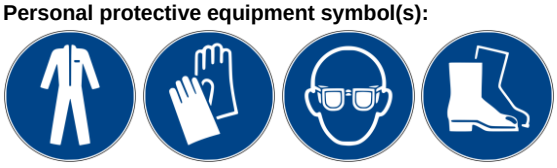
8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Emergency eye wash fountains and safety showers 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:
Protective clothing. Gloves. Safety glasses. Chemical resistant safety shoes.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:
Safety glasses with side shields. Safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses	Normal use conditions	With side shields	EN 166
Face shield	Droplet, If there is a risk of liquid being splashed :	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:
Long sleeved protective clothing. Chemical resistant safety shoes

Skin and body protection	
Type	**Standard**
Long sleeved protective clothing	
Chemical resistant safety shoes	EN ISO 20345
Use chemically protective clothing	EN 13034

Hand protection:
Protective gloves

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0.35		EN ISO 374
Disposable gloves	Butyl rubber	6 (> 480 minutes)	0.5		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:
No respiratory protection needed under normal use conditions. In case of inadequate ventilation wear respiratory protection.

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
	Gas/vapour filter, Filter B (grey)		

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	light yellow.
Odour	:	Chlorine.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	0 °C
Boiling point	:	100 °C
Flammability	:	Non flammable.
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	:	Not available
Solubility	:	In water, material soluble.

Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	1.075 – 1.085
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

Contact with acids liberates toxic gas. No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from (strong) acids. None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Acids. Combustible materials.

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 (Conclusive but not sufficient for classification)
Acute toxicity (dermal)	:	Not classified (Conclusive but not sufficient for classification)
Acute toxicity (inhalation)	:	Not classified (Conclusive but not sufficient for classification)

2-(2-dodecoxyethoxy)acetic acid (27306-90-7)	
LD50 oral rat	> 2000 mg/kg

sodium hypochlorite, solution… % Cl active (7681-52-9)	
LD50 oral rat	1100 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 oral	8910 mg/kg bodyweight
LD50 dermal rabbit	> 20000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: other:
LD50 dermal	> 20000 mg/kg bodyweight

sodium hypochlorite, solution… % Cl active (7681-52-9)	
LC50 Inhalation - Rat (Dust/Mist)	> 10500 mg/l
LC50 Inhalation - Rat (Vapours)	> 10.5 mg/l

Sodium octyl sulphate (142-31-4)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 oral	3200 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

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

sodium hypochlorite, solution… % Cl active (7681-52-9)	
pH	11

Sodium hydroxide; caustic soda (1310-73-2)	
pH	> 14

Sodium octyl sulphate (142-31-4)	
pH	8 Concentration: 1 other:

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

sodium hypochlorite, solution… % Cl active (7681-52-9)	
pH	11

Sodium hydroxide; caustic soda (1310-73-2)	
pH	> 14

Sodium octyl sulphate (142-31-4)	
pH	8 Concentration: 1 other:

Respiratory or skin sensitisation : Not classified (Conclusive but not sufficient for classification)

Germ cell mutagenicity : Not classified (Conclusive but not sufficient for classification)

Carcinogenicity : Not classified (Conclusive but not sufficient for classification)

sodium hypochlorite, solution… % Cl active (7681-52-9)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified (Conclusive but not sufficient for classification)

STOT-single exposure : Not classified (Conclusive but not sufficient for classification)

STOT-repeated exposure : Not classified (Conclusive but not sufficient for classification)

Sodium octyl sulphate (142-31-4)	
LOAEL (oral, rat, 90 days)	1016 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	488 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Aspiration hazard : Not classified (Conclusive but not sufficient for classification)

Sodium hydroxide; caustic soda (1310-73-2)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : 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 substances 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 %

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Very toxic to aquatic life.

Hazardous to the aquatic environment, long–term (chronic) : Toxic to aquatic life with long lasting effects.

sodium hypochlorite, solution… % Cl active (7681-52-9)	
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): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.0183 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)

Sodium hydroxide; caustic soda (1310-73-2)	
LC50 - Fish [1]	> 35 mg/l
EC50 - Crustacea [1]	40.4 mg/l Test organisms (species): Ceriodaphnia sp.
EC50 - Other aquatic organisms [1]	> 33 mg/l waterflea

Sodium octyl sulphate (142-31-4)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 511 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	511 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	6.86 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 1.357 mg/l Test organisms (species): Pimephales promelas Duration: '42 d'

12.2. Persistence and degradability

HG headstone cleaner	
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.

2-(2-dodecoxyethoxy)acetic acid (27306-90-7)	
Persistence and degradability	Rapidly degradable

sodium hypochlorite, solution… % Cl active (7681-52-9)	
Persistence and degradability	Rapidly degradable

Sodium hydroxide; caustic soda (1310-73-2)	
Persistence and degradability	Rapidly degradable

Sodium octyl sulphate (142-31-4)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

HG headstone cleaner	
Bioaccumulative potential	No bioaccumulation expected.

sodium hypochlorite, solution… % Cl active (7681-52-9)	
Partition coefficient n-octanol/water (Log Pow)	-3.42

Sodium hydroxide; caustic soda (1310-73-2)	
Partition coefficient n-octanol/water (Log Pow)	-3.88

Sodium octyl sulphate (142-31-4)	
Partition coefficient n-octanol/water (Log Pow)	-0.27

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

Adverse effects on the environment caused by endocrine disrupting properties : 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 substances 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 %.

12.7. Other adverse effects

No additional information available

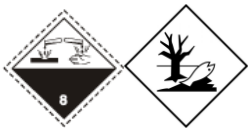
SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	:	Disposal must be done according to official regulations.
Waste treatment methods	:	Dispose of in accordance with relevant local regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	:	Do not flush down sewers. Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	:	Do not pierce or burn, even after use. Beware of residues or vapours which remain in the drums. Disposal must be done according to official regulations.
Additional information	:	Do not re-use empty containers.
European List of Waste (LoW, EC 2000/532)	:	20 01 29* - detergents containing dangerous substances 20 01 39 - plastics
HP Code	:	HP2 - "Oxidising:" waste which may, generally by providing oxygen, cause or contribute to the combustion of other materials. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

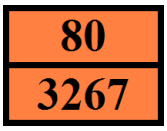
In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3267	UN 3267	UN 3267	UN 3267	UN 3267
14.2. UN proper shipping name				
CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (sodium hypochlorite, solution… % Cl active ; Sodium hydroxide; caustic soda)	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (sodium hypochlorite, solution… % Cl active ; Sodium hydroxide; caustic soda)	Corrosive liquid, basic, organic, n.o.s. (sodium hypochlorite, solution… % Cl active ; Sodium hydroxide; caustic soda)	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (sodium hypochlorite, solution… % Cl active ; Sodium hydroxide; caustic soda)	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (sodium hypochlorite, solution… % Cl active ; Sodium hydroxide; caustic soda)
Transport document description				
UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (sodium hypochlorite, solution… % Cl active ; Sodium hydroxide; caustic soda), 8, II, (E), ENVIRONMENTALLY HAZARDOUS	UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (sodium hypochlorite, solution… % Cl active ; Sodium hydroxide; caustic soda), 8, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 3267 Corrosive liquid, basic, organic, n.o.s. (sodium hypochlorite, solution… % Cl active ; Sodium hydroxide; caustic soda), 8, II, ENVIRONMENTALLY HAZARDOUS	UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (sodium hypochlorite, solution… % Cl active ; Sodium hydroxide; caustic soda), 8, II, ENVIRONMENTALLY HAZARDOUS	UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (sodium hypochlorite, solution… % Cl active ; Sodium hydroxide; caustic soda), 8, II, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
II	II	II	II	II

ADR	IMDG	IATA	ADN	RID
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	C7
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	1l
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02
Mixed packing provisions (ADR)	:	MP15
Portable tank and bulk container instructions (ADR)	:	T11
Portable tank and bulk container special provisions (ADR)	:	TP2, TP27
Tank code (ADR)	:	L4BN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	2
Hazard identification number (Kemler No.)	:	80
Orange plates	:	
Tunnel restriction code (ADR)	:	E

Transport by sea

Special provisions (IMDG)	:	274
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T11
Tank special provisions (IMDG)	:	TP2, TP27
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Stowage category (IMDG)	:	B
Stowage and handling (IMDG)	:	SW2
Segregation (IMDG)	:	SGG18, SG35
Properties and observations (IMDG)	:	Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y840
PCA limited quantity max net quantity (IATA)	:	0.5L
PCA packing instructions (IATA)	:	851
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	855
CAO max net quantity (IATA)	:	30L
Special provisions (IATA)	:	A3, A803
ERG code (IATA)	:	8L

Inland waterway transport

Classification code (ADN)	:	C7
Special provisions (ADN)	:	274
Limited quantities (ADN)	:	1 L
Excepted quantities (ADN)	:	E2

Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0

Rail transport

Classification code (RID)	:	C7
Special provisions (RID)	:	274
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001, IBC02
Mixed packing provisions (RID)	:	MP15
Portable tank and bulk container instructions (RID)	:	T11
Portable tank and bulk container special provisions (RID)	:	TP2, TP27
Tank codes for RID tanks (RID)	:	L4BN
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE6
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)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Detergent Regulation (648/2004)

Labelling of contents

Component	%
anionic surfactants, chlorine-based bleaching agents	<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
	Indication of changes	Removed	
	Type of product	Modified	
	Revision date	Modified	
	Adverse health effects caused by endocrine disrupting properties	Added	
	Flammability	Modified	
1.2	Main use category	Modified	
2.1	Adverse physicochemical, human health and environmental effects	Modified	
2.2	Precautionary statements (CLP)	Modified	
2.2	EUH-statements	Added	
4.1	First-aid measures general	Added	
4.1	First-aid measures after ingestion	Modified	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures after skin contact	Modified	
4.2	Symptoms/effects after ingestion	Added	
4.2	Symptoms/effects after eye contact	Modified	
4.2	Symptoms/effects after skin contact	Modified	
4.3	Other medical advice or treatment	Modified	
5.1	Suitable extinguishing media	Modified	
5.2	Reactivity in case of fire	Added	
5.2	Explosion hazard	Added	
5.2	Fire hazard	Added	
5.2	Hazardous decomposition products in case of fire	Modified	
5.3	Firefighting instructions	Added	
6.1	Protective equipment	Added	
6.1	Emergency procedures	Added	
6.1	General measures	Added	
6.1	Emergency procedures	Modified	
6.3	Methods for cleaning up	Modified	
6.3	For containment	Modified	
6.4	Reference to other sections (8, 13)	Modified	

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
7.1	Additional hazards when processed	Added	
7.1	Precautions for safe handling	Modified	
7.2	Incompatible materials	Modified	
7.2	Incompatible products	Removed	
7.2	Storage conditions	Modified	
7.2	Special rules on packaging	Added	
7.2	Packaging materials	Added	
7.2	Technical measures	Added	
7.2	Storage temperature	Modified	
8.2	Respiratory protection	Modified	
8.2	Eye protection	Modified	
8.2	Appropriate engineering controls	Modified	
9.1	Melting point	Added	
10.1	Reactivity	Removed	
10.2	Chemical stability	Removed	
10.3	Possibility of hazardous reactions	Modified	
10.4	Conditions to avoid	Modified	
10.5	Incompatible materials	Modified	
10.6	Hazardous decomposition products	Removed	
12.1	Ecology - general	Modified	
12.2	Persistence and degradability	Added	
12.3	Bioaccumulative potential	Added	
13.1	Regional waste regulation	Added	
13.1	Additional information	Added	
13.1	Sewage disposal recommendations	Added	
13.1	Product/Packaging disposal recommendations	Added	
13.1	Waste treatment methods	Modified	

Training advice : Ensure personnel is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.

Other information : Normal use of this product shall imply use in accordance with the instructions on the packaging. 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.

Full text of H- and EUH-statements:	
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.
EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine).
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.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic 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

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.