

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

1.1. Product identifier

Product form : Mixture
Product name : HG duo unblocker component 1
Product code : 344 ART (343 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

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

Manufacturer

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	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+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 2 H315
Serious eye damage/eye irritation, Category 2 H319
Hazardous to the aquatic environment – Chronic Hazard, Category 1 H410
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye irritation. Very toxic to aquatic life.

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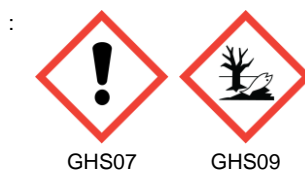
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2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

Hazard statements (CLP)

Precautionary statements (CLP)

EUH-statements

- : Warning
- : H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H410 - Very toxic to aquatic life with long lasting effects.
- : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective gloves.
P391 - Collect spillage.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- : EUH206 - Warning! Do not use together with other products. May release dangerous gases (chlorine).

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	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sodium hypochlorite, solution... % Cl active (Active substance (Biocide)) (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 substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, PL, PT, SE, SK)	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-2119457892-27	$\geq 1 - < 2$	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318
2-(2-dodecoxyethoxy)acetic acid	CAS-No.: 27306-90-7 EC-No.: 608-079-9	$\geq 0.1 - < 1$	Eye Dam. 1, H318
Sulphuric acid, monoocylester, sodium salt	CAS-No.: 142-31-4 EC-No.: 205-535-5 REACH-no: 01-2119966154-35	$\geq 0.1 - < 1$	Skin Irrit. 2, H315 Eye Dam. 1, H318

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Specific concentration limits:		
Name	Product identifier	Specific concentration limits
sodium hypochlorite, solution... % Cl active (Active substance (Biocide))	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 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 : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

- Symptoms/effects after inhalation : No specific data.
- Symptoms/effects after skin contact : Irritation. Redness.
- Symptoms/effects after eye contact : Eye irritation. Redness.
- Symptoms/effects after ingestion : No specific data.

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

Treat symptomatically. In case of skin contact: Diphoterine.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray. dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).
- 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

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

5.3. Advice for firefighters

- Precautionary measures fire : Evacuate area. Stop leak if safe to do so.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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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

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

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.

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. Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Approach from upwind. Collect spillage. 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 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. Avoid breathing spray, vapours.

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

Storage conditions : Store in a well-ventilated place. Keep cool. Protect from sunlight. Keep container tightly closed. Keep only in original container. Protect from freezing. Keep away from (strong) acids.

Incompatible products : Strong acids.

Incompatible materials : Keep away from (strong) acids.

Storage temperature : 0 – 35 °C

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

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sodium hydroxide; caustic soda (1310-73-2)	
Ireland - Occupational Exposure Limits	
Local name	Sodium hydroxide
OEL STEL	2 mg/m ³
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/m ³
Acute - local effects, inhalation	3.1 mg/m ³
Long-term - local effects, dermal	0.5 % in mixture
Long-term - systemic effects, inhalation	1.55 mg/m ³
Long-term - local effects, inhalation	1.55 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	3.1 mg/m ³
Acute - local effects, inhalation	3.1 mg/m ³
Long-term - systemic effects, oral	0.26 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1.55 mg/m ³
Long-term - local effects, dermal	0.5 % in mixture
Long-term - local effects, inhalation	1.55 mg/m ³
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/m ³
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	1 mg/m ³

8.1.5. Control banding

No additional information available

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

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

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

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 insufficient ventilation, wear suitable respiratory equipment

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

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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	: Not applicable
Explosive limits	: Not available
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	: 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

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

10.4. Conditions to avoid

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

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10.5. Incompatible materials

Acids.

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

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), Remarks on results: other:
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
LC50 Inhalation - Rat (Dust/Mist)	> 10500 mg/l
LC50 Inhalation - Rat (Vapours)	> 10.5 mg/l

Sulphuric acid, monoctylester, sodium salt (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 skin irritation.
pH: > 13

sodium hypochlorite, solution... % Cl active (7681-52-9)

pH	11
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sodium hydroxide; caustic soda (1310-73-2)

pH	14
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Sulphuric acid, monoctylester, sodium salt (142-31-4)

pH	8 Concentration: 1 other:
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Serious eye damage/irritation : Causes serious eye irritation.
pH: > 13

sodium hypochlorite, solution... % Cl active (7681-52-9)

pH	11
----	----

sodium hydroxide; caustic soda (1310-73-2)

pH	14
----	----

Sulphuric acid, monoctylester, sodium salt (142-31-4)

pH	8 Concentration: 1 other:
----	---------------------------

Respiratory or skin sensitisation : Not classified

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Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

sodium hypochlorite, solution... % Cl active (7681-52-9)

IARC group : 3 - Not classifiable

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

Sulphuric acid, monooctylester, sodium salt (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

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

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

sodium hypochlorite, solution... % Cl active (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)

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

Sulphuric acid, monooctylester, sodium salt (142-31-4)

LC50 - Fish [1] : > 100 mg/l

EC50 - Crustacea [1] : > 100 mg/l Test organisms (species): Daphnia magna

EC50 - Other aquatic organisms [1] : > 100 mg/l waterflea

EC50 72h - Algae [1] : > 511 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

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Sulphuric acid, monooctylester, sodium salt (142-31-4)	
EC50 72h - Algae [2]	511 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 96h - Algae [1]	11774 mg/l Source: ECOSAR
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	≥ 1357 mg/l Test organisms (species): Pimephales promelas Duration: '42 d'

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

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
Sulphuric acid, monooctylester, sodium salt (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 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 %.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose of in accordance with relevant local regulations.

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

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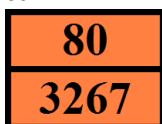
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.2. UN proper shipping name				
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
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) : 11
 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

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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)

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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	%
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:

SDS EU format according to COMMISSION REGULATION (EU) 2020/878. Transport information. Printed by ExESS software.

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
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer

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Abbreviations and acronyms:	
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
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Other information

: **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.

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Full text of H- and EUH-statements:	
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.
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

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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.