SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING *

1.1. Product identifier

Product name : STAR BRITE BLACK STAIN REMOVER
Product code : 865XX

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

Application : SU21 Consumer product. PC35 Cleaning agent. Other cleaning, care and maintenance products (excludes biocidal products).

1.3. Details of the supplier of the safety data sheet

Supplier : Star brite Nederland B.V.
Kryptonweg 7
NL-3812 RZ Amersfoort, The Netherlands
Telephone : +31(0)337853616
E-mail : info@starbrite.nl
Website : http://www.starbrite.nl

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:
NL - Telephone : +31(0)337853616 (During office hours only)

SECTION 2 HAZARDS IDENTIFICATION *

2.1. Classification of the substance or mixture

CLP classification (1272/2008/EC) : Corrosive to metals, category 1. Skin corrosion, category 1. Serious eye damage, category 1. Hazardous to the aquatic environment — Acute category 1. Hazardous to the aquatic environment — Chronic category 2.

Human health hazards : Causes severe skin burns and eye damage. Corrosive to the respiratory tract. Warning! Do not use together with other products. May release dangerous gases (chlorine).

Physical/chemical hazards : Contact with acids liberates toxic gas. Reacts vigorously in contact with acids. Strong heat development possible. May be corrosive to metals.

Environmental hazards : Very toxic to aquatic organisms. Toxic to aquatic life with long lasting effects.

Other information : Do not breathe spray. Use only in well-ventilated areas.

2.2. Label elements

Label elements ((EU) 1272/2008):

Hazard pictograms :



Signal word : Danger

H- and P-phrases :

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
EUH031	Contact with acids liberates toxic gas.
EUH071	Corrosive to the respiratory tract.

EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine).
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P234	Keep only in original packaging.
P260	Do not breathe spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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/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/doctor.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P273	Avoid release to the environment.
P391	Collect spillage.
P390	Absorb spillage to prevent material damage.
P501	Dispose of contents/container to an official chemical waste depot.

Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases:

Hazard pictograms :





Signal word : Danger

H- and P-phrases :

H314	Causes severe skin burns and eye damage.
EUH031	Contact with acids liberates toxic gas.
EUH071	Corrosive to the respiratory tract.
EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine).
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P260	Do not breathe spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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/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/doctor.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: Sodium hypochlorite 5 % ; Sodium hydroxide .

Ingredient declaration according to Regulation EC 648/2004:

Contains:	Concentration (%)
Chlorine-based bleaching agents	5 - 15
Amphoteric surfactants	< 5
Perfumes	

Other information : According to regulation (EC) 1272/2008, Annex II, part 3, the packaging of this product shall carry a tactile warning of danger and a child-resistant fastening.

2.3. Other hazards

Other information : Does not contain PBT or vPvB substances in concentrations higher than 0,1%. Human health: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher. Environment: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS *

3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
Sodium hypochlorite	5 - < 10	7681-52-9	231-668-3		
Sodium hydroxide	1 - < 5	1310-73-2	215-185-5		
N,N-Dimethyldodecylamine N-oxide	0,1 - < 1	1643-20-5	216-700-6		

Substance name	Hazard Class	H-phrases	Pictograms	
Sodium hypochlorite	Met. Corr. 1; Skin Corr. 1B; Eye Dam. 1; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1	H290; H314; H318; H335; H400; H410; EUH031	GHS05; GHS07; GHS09	M (acute) = 10 M (chronic) = 1 H290 : C >= 5 % EUH031 : C >= 5 %
Sodium hydroxide	Met. Corr. 1; Skin Corr. 1A; Eye Dam. 1	H290; H314; H318	GHS05	H314 A : C >= 5 % H314 B : C >= 2 % H318 : C >= 2 % H319 : C >= 0,5 % H315 : C >= 0,5 %
N,N-Dimethyldodecylamine N-oxide	Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 2	H302; H315; H318; H400; H411	GHS05; GHS07; GHS09	M (acute) = 1

Occupational exposure limit(s), if relevant, are listed in section 8.

Reference is made to chapter 16 for full text of each relevant H phrase.

SECTION 4 FIRST-AID MEASURES

4.1. Description of first aid measures

First aid measures

Inhalation : Move victim into fresh air. Transport to a hospital immediately.

Skin contact : Immediately wash off skin with plenty of water. Take off contaminated clothing. Consult a doctor in case burns or irritation occur.

Eye contact : Wash out with (lukewarm) water for at least 15 minutes. Remove contact lenses. Transport to a hospital immediately.

Ingestion : Do not induce vomiting. Rinse the mouth, give 1 glass of water at most. Do not give milk. Never give anything by mouth to an unconscious person. Transport to a hospital immediately.

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

Effects and symptoms

Inhalation	:	Corrosive. May cause sore throat and coughing. May cause shortness of breath or lack of breath.
Skin contact	:	Corrosive. May cause redness, pain and severe burns (blisters).
Eye contact	:	Corrosive. May cause redness and severe pain. Tears.
Ingestion	:	Corrosive. May cause burning pain in throat and mouth. May cause a feeling of sickness, vomiting and diarrhoea.

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

Note to physicians : None known.

SECTION 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Suitable	:	Foam. Dry chemical. Water fog.
Not suitable	:	Carbondioxide (CO_2). Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards	:	Reacts violently with flammable and reducing agents with risk of explosions. Water may be used to cool containers. Heating causes oxygen release, intensifying the fire.
Hazardous thermal decomposition and combustion products	:	Generates toxic (phosgene) and corrosive vapours (hydrochloric acid) in case of fire. Carbon monoxide may be evolved if incomplete combustion occurs.

5.3. Advice for firefighters

Special protective equipment for fire-fighters	:	Use adequate respiratory equipment in case of insufficient ventilation. Attention: extinguishing water can be corrosive.
Other information	:	Collect contaminated fire extinguishing water separately. Avoid release of product into sewers, surface water and/or ground water.

SECTION 6 ACCIDENTAL RELEASE MEASURES *

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material.

6.2. Environmental precautions

Environmental precautions	:	Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike. Waste product should not be allowed to contaminate soil or water. Large scale discharge causing a very high pH may impair the biological system in sewage plants. Inform the official bodies if necessary.
Other information	:	Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spilled material in containers. Carefully neutralise residues with acid. Absorb residues in sand or other inert material. Do not use saw-dust. Dispose at an authorised waste collection point. Wash away remainder with plenty of water.

6.4. Reference to other sections

Reference to other sections : See also section 8.

SECTION 7 HANDLING AND STORAGE *

7.1. Precautions for safe handling

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. When dissolving or diluting, always add product to water. NEVER vice versa. Do not breathe spray. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing. After contact with skin, wash immediately with plenty of water.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool, dry and well-ventilated place.
Recommended packaging : Keep only in the original container.
Non recommended packaging : Steel and aluminium. PET and PETG.

7.3. Specific end use(s)

Use : Use only as directed. Do not mix with other products. Corrosive to the respiratory tract.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION *

8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Workplace exposure limits (mg/m³):

Chemical name	Province	TWA 8 hour (mg/m3)	STEL 15 min (mg/m3)	Comments	Source
Sodium hydroxide	GB	-	2	-	GESTIS

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Sodium hypochlorite	Inhalation	1,55 mg/m3	3,1 mg/m3		1,55 mg/m3
Sodium hydroxide	Inhalation			1 mg/m3	
N,N-Dimethyldodecylamine N-oxide	Inhalation				6,2 mg/m3
	Dermal				11 mg/kg bw/day

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
Sodium hypochlorite	Inhalation		3,1 mg/m3		1,55 mg/m3
	Oral				0,26 mg/kg bw/day
Sodium hydroxide	Inhalation			1 mg/m3	
N,N-Dimethyldodecylamine N-oxide	Inhalation				1,53 mg/m3
	Dermal				5,5 mg/kg bw/day
	Oral				0,44 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Sodium hypochlorite	Water	0,00021 mg/l	0,000042 mg/l	
	Intermittent water			0,00026 mg/l
	STP			0,03 mg/l
	Oral			11,1 mg/kg food
N,N-Dimethyldodecylamine N-oxide	Water	0,034 mg/l	0,003 mg/l	
	Sediment	5,24 mg/kg	0,524 mg/kg	

	STP Soil Oral			24 mg/l 1,02 mg/kg 11,1 mg/kg food

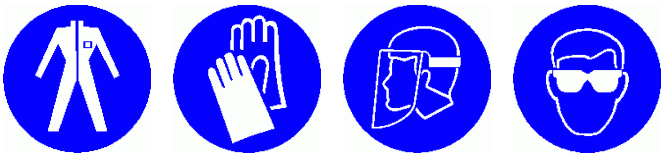
8.2. Exposure controls

Engineering measures : Use only in well-ventilated areas. Comply with standard precautionary measures for working with chemicals.

Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:
The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.

:



Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: PVC. Indication of permeation breakthrough time: 6 hours.

Respiratory protection : Take care of sufficient ventilation.

Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: PVC. ± 0,5 mm. Indication of permeation breakthrough time: 6 hours.

Eye protection : Wear a face shield or appropriate safety glasses with side shields, in accordance with EN 166.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES *

9.1. Information on basic physical and chemical properties

Physical state	: Liquid.	
Colour	: Light yellow.	
Odour	: Perfumed.	
Odour threshold	: Not known.	
pH	: 13	
Alkali reserve (g NaOH/100 ml)	: 1,2	
Solubility in water	: Soluble.	
Partition coefficient (n-octanol/water)	: Not applicable.	Contains surfactants. The O/W system emulsifies. Not measured. Not relevant for mixtures.
Flash point	: > 100 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 240 °C	
Boiling point/boiling range	: 100 °C	
Melting point/melting range	: 0 °C	
Explosive properties	: Not explosive.	
Explosion limits (% in air)	: Not known.	
Oxidising properties	: Slightly oxidizing.	
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not known.	
Viscosity (40°C)	: Not relevant.	The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C)	: Not known.	
Relative vapour density	: Not relevant.	The solvent content of this product is less than 1%.
Relative density (20°C)	: 1,08 g/ml	
Particle characteristics	: Not applicable.	Liquid.

9.2. Other information

Other information : Not relevant.

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity : See sub-sections below.

10.2. Chemical stability

Stability : Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactivity : Reacts with amines. Reacts vigorously in contact with acids. Strong heat development possible. Reacts with metals.

10.4. Conditions to avoid

Conditions to avoid : See section 7.

10.5. Incompatible materials

Materials to avoid : Keep away from acids. Keep away from reducing agents. Keep away from halogenated substances. Keep away from heavy metals.

10.6. Hazardous decomposition products

Hazardous decomposition products : May include and are not limited to: HCl-gas and chlorine vapours.

SECTION 11 TOXICOLOGICAL INFORMATION *

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

No toxicological research has been carried out on this product.

Inhalation

- Acute toxicity : Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: < 1 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Corrosive. May cause sore throat and coughing. May cause pulmonary oedema. Symptoms of pulmonary oedema often manifest after several hours.
- Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Skin contact

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 5000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Corrosive. May cause redness, pain and burns (blisters).
- Sensitisation : Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Eye contact

- Corrosion/irritation : Corrosive. Risk of serious damage to eyes.

Ingestion

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Not classified - based on available data, the classification criteria are not met.

Aspiration	:	Danger of aspiration is not expected. Contains a substance/substances with an aspiration hazard. Not classified - based on available data, the classification criteria are not met.
Corrosion/irritation	:	Corrosive. May cause burning pain in throat and mouth. May cause a feeling of sickness, stomachache, vomiting and diarrhoea.
Carcinogenicity	:	Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
Mutagenicity	:	Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.
Reprotoxicity	:	Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
Sodium hypochlorite	LD50 (dermal)	> 20000 mg/kg bw	OECD 402	Rabbit
	LC50 (inhalation)	> 10500 mg/m3		Rat
	LD50 (oral)	8910 mg/kg bw	-----	Rat
	NOEL (carcinogenicity, oral)	> 50 mg/kg bw/d	OECD 451	Rat
	NOAEL (oral)	> 50 mg/kg bw/d		
	Genotoxicity - in vitro	Genotoxic	OECD 473	
	Genotoxicity - in vivo	2500 mg/kg bw/d	OECD 473	
	Eye irritation	Irritant	OECD 405	Rabbit
	Skin irritation	Corrosive.		-----
	Mutagenicity	Positive	OECD 471	Salmonella typhimurium
	NOAEL (development, oral)	> 5,7 mg/kg bw/d	OECD 414	Rat
	NOAEL (fertility, oral)	> 5 mg/kg bw/d		Rat
	Skin sensitisation	Not sensitizing	OECD 406	Guinea pig
Sodium hydroxide	Eye irritation	Corrosive.		
	Skin irritation	Corrosive.		
	LD50 (oral) - estimate	> 2000 mg/kg bw		
	Skin sensitisation - estimate	Not sensitizing		
	Genotoxicity - estimate	Not genotoxic		

11.2. Information on other hazards

Endocrine disrupting properties	:	This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other information	:	Not applicable.

SECTION 12 ECOLOGICAL INFORMATION *

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity	:	Very toxic to aquatic organisms. Calculated LC50 (fish): 39 mg/l. Calculated EC50 (waterflea): 2 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence – degradability	:	May cause long-term adverse effects in the aquatic environment. The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents.

12.3. Bioaccumulative potential

Bioaccumulative potential	:	No specific information known.

12.4. Mobility in soil

Mobility : If product enters soil, it will be highly mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

12.6. Endocrine disrupting properties

Endocrine disrupting properties : This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

Other adverse effects : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
Sodium hypochlorite	NOEC (waterflea) - acute	0,05 mg/l	OECD 202	Daphnia magna
	LC50 (fish)	2,1 mg/l		
	EC50 (waterflea)	0,141 mg/l	OECD 202	Daphnia magna
	Log P(ow)	-3,4		
N,N-Dimethyldodecylamine N-oxide	LC50 (bacteria)	190 mg/l	DIN 38412 Part 8	Pseudomonas putida
	Ultimate anaerobic biodegradation (%)	99,8 %	OECD 303 A	
	EC50 (waterflea)	> 1 mg/l		Daphnia magna
	LC50 (fish)	10,5 mg/l	OECD 203	Brachydanio rerio
	NOEC (waterflea) - chronic	0,36 mg/l.d		Daphnia magna
	IC50 (algea)	> 0,01 mg/l		Selenastrum capricornutum
	Ultimate aerobic biodegradation (%)	95,2 %	OECD 301 B	
	Log P(ow)	1,85		

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues and non-empty pack as hazardous waste.

Additional warning : None.

Waste water discharge : Do not dispose of into the environment, drains, sewers or water courses.

European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.

Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

SECTION 14 TRANSPORT INFORMATION

14.1. UN number or ID number

UN nr. : UN 3266

14.2. UN proper shipping name

Transport name : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hypochlorite ; Sodium hydroxide)
Transport name (IMDG, IATA) : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Sodium hypochlorite ; Sodium hydroxide)

14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

- Class : 8
- Classification code : C5
- Packaging group : III
- Danger label : 8 + the “environmentally hazardous substance” mark.
- Tunnel restriction code : E

:





Other information : Not intended for carriage by tank-vessels on inland waterways. Packagings with a quantity of 5 l or less for liquids or 5 kg, or less for solids need not be marked with the environmentally hazardous substance mark.

IMDG (sea)

- Class : 8
- Packaging group : III
- EmS (fire / spill) : F - A / S - B
- Marine pollutant : Yes
- Other information : Packagings with a quantity of 5 l or less for liquids or 5 kg, or less for solids need not be marked with the environmentally hazardous substance mark.

IATA (air)

- Class : 8
- ERG code : 8L

14.6. Special precautions for user

Other information : Country specific variations may apply. It is possible that a "Limited Quantity" exemption applies to the transport of this product.

14.7. Maritime transport in bulk according to IMO instruments

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

SECTION 15 REGULATORY INFORMATION

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

Community regulations : Regulation (EU) No 2020/878 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations. Regulation (EC) No 648/2004 (detergents). Directive 2008/98/EC (waste).

15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

SECTION 16 OTHER INFORMATION *

16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2020/878 dated 18 June 2020 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (*).

List of abbreviations and acronyms that could be used (but not necessarily are used) in this safety data sheet:

ADR	:	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	:	Acute Toxicity Estimate
CLP	:	Classification, Labeling & Packaging
CMR	:	Carcinogenic, Mutagenic or toxic for Reproduction
EEC	:	European Economic Community
GHS	:	Globally Harmonized System of Classification and Labelling of Chemicals
IATA	:	International Air Transport Association
IBC code	:	The IMO International Code for construction and equipment of ships carrying dangerous chemicals in bulk.
IMDG	:	International Maritime Dangerous Goods Code
LD50/LC50	:	Lethal Dose/Concentration for 50% of a population
MAC	:	Maximum Allowable Concentration
MARPOL	:	International Convention for the Prevention of Pollution From Ships
NO(A)EL	:	No Observed (Adverse) Effect Level
OECD	:	Organisation for Economic Co-operation and Development
PBT	:	Persistent, Bioaccumulative and Toxic
PC	:	Chemical product category
PT	:	Product type
REACH	:	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	:	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	:	Sewage Treatment Plant
SU	:	Sector of Use
TWA/STEL	:	Time-Weighted Average/Short Term Exposure Limit
UN	:	United Nations
UFI	:	Unique formula identifier
VOC	:	Volatile Organic Compounds
vPvB	:	Very Persistent and Very Bioaccumulative

Key data used to compile the Safety Data Sheet are from, but not limited to, one or more sources of information e.g. toxicological data from material suppliers, CONCAWE, IFRA, CESIO, Regulation EG 1272/2008, etc.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Skin Corr. 1	:	Calculation method.
Eye Dam. 1	:	Calculation method.
Aquatic Chronic 2	:	Calculation method.
Aquatic Acute 1	:	Calculation method.
Met. Corr. 1	:	Expert judgement.

Full text of hazard classes mentioned in section 3:

Acute Tox. 4	:	Acute toxicity, category 4.
Skin Corr. 1A/B/C	:	Skin corrosive, category 1A/B/C.
Skin Irrit. 2	:	Skin irritation, category 2.
Eye Dam. 1	:	Serious eye damage, category 1.
STOT SE 3	:	Specific target organ toxicity after single exposure, category 3.
Aquatic Chronic 1	:	Hazardous to the aquatic environment — Chronic category 1.
Aquatic Chronic 2	:	Hazardous to the aquatic environment — Chronic category 2.
Aquatic Acute 1	:	Hazardous to the aquatic environment — Acute category 1.

Met. Corr. 1	:	Corrosive to metals, category 1.

Full text of H-phrases mentioned in section 3:

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory 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.
EUH031	Contact with acids liberates toxic gas.

Advice on any training appropriate for workers: none.

Country / Language code	:	EC / EN
Number format	:	"," used as decimal separator.

End of safety data sheet.