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

1.1 Product identifier

Trade name	:	buraton® CL surface
Unique Formula Identifier (UFI)	:	E2T1-P0HT-R000-SGC7

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

Use of the Substance/Mixture	:	Disinfectants
Recommended restrictions on use	:	Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Producer	:	Schulke CZ, s.r.o. Lidická 445 73581 Bohumín Czech Republic Telephone: +420 558 320 260 schulkecz@schuelke.com
Supplier	:	Schülke & Mayr UK Ltd. Cygnet House 1, Jenkin Road Sheffield S9 1AT United Kingdom Telephone: +44 114 254 35 00 Telefax: +44 114 254 35 01 mail.uk@schulke.com
E-mail address of person responsible for the SDS/Contact person	:	ChemicalCompliance@schuelke.com

1.4 Emergency telephone number

Emergency telephone number	:	UK Poisons Emergency number: 0870 600 6266 Carechem 24 International:+44 1235 239670

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Corrosive to metals, Category 1	H290: May be corrosive to metals.
Skin corrosion, Sub-category 1B	H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1	H318: Causes serious eye damage.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 2	H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms :

Signal word : Danger

Hazard statements :
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH031 Contact with acids liberates toxic gas.

Precautionary statements :

Prevention:

P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P310 Immediately call a POISON CENTER/ doctor.
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.

Hazardous components which must be listed on the label:
sodium hypochlorite

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Solution of the following substances with harmless additives.

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
sodium hypochlorite	7681-52-9 231-668-3 017-011-00-1 01-2119488154-34-XXXX	Met. Corr. 1; H290 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system) Aquatic Acute 1; H400 Aquatic Chronic 1; H410 _____ M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1 _____ specific concentration limit EUH031 >= 5 %	>= 3 - < 5
sodium hydroxide	1310-73-2 215-185-5 011-002-00-6 01-2119457892-27-XXXX	Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318 _____ specific concentration limit Skin Corr. 1A; H314 >= 5 % Skin Corr. 1B; H314 2 - < 5 % Skin Irrit. 2; H315 0.5 - < 2 % Eye Irrit. 2; H319 0.5 - < 2 %	>= 0.5 - < 1
Amines, C12-18-alkyldimethyl, N-oxides	68955-55-5 273-281-2 - - - 01-2119489396-21-XXXX	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 _____ M-Factor (Acute	>= 0.1 - < 0.25

		aquatic toxicity): 1	

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Take off all contaminated clothing immediately.
If inhaled	:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a physician immediately.
In case of skin contact	:	Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.
In case of eye contact	:	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
If swallowed	:	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	:	Treat symptomatically.
Risks	:	Causes serious eye damage. Causes severe burns.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	:	For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Dry powder Foam Carbon dioxide (CO2) Water spray jet
Unsuitable extinguishing media	:	Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-	:	Heating or fire can release toxic gas.

fighting		Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	:	chlorine Gaseous hydrogen chloride (HCl).

5.3 Advice for firefighters

Special protective equipment for firefighters	:	Wear self-contained breathing apparatus and protective suit.
Specific extinguishing methods	:	Do not allow run-off from fire fighting to enter drains or water courses.
Further information	:	Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Ensure adequate ventilation. Use personal protective equipment. Do not breathe vapour. Avoid contact with skin and eyes.

6.2 Environmental precautions

Environmental precautions	:	Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Wipe up with absorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated surface thoroughly.

6.4 Reference to other sections

see Section 8 + 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Provide sufficient air exchange and/or exhaust in work rooms. Avoid inhalation, ingestion and contact with skin and eyes.
Hygiene measures	:	Keep away from food and drink.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store in original container. Keep tightly closed.
Further information on storage conditions	:	Keep away from direct sunlight. Recommended storage temperature: -5 - 25°C

Advice on common storage : Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
Do not store together with acids and ammonium salts.

7.3 Specific end use(s)

Specific use(s) : none

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
sodium hydroxide	1310-73-2	STEL	2 mg/m3	GB EH40
chlorine	7782-50-5	STEL	0.5 ppm 1.5 mg/m3	GB EH40
		STEL	0.5 ppm 1.5 mg/m3	2006/15/EC
	Further information: Indicative			

Hazardous decomposition products

Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
sodium hypochlorite	Workers	Inhalation	Acute local effects, Acute systemic effects	3.1 mg/m3
	Workers	Inhalation	Long-term local effects, Long-term systemic effects	1.55 mg/m3
	Workers	Skin contact	Long-term local effects	5000 ppm
sodium hydroxide	Consumers	Inhalation	Long-term local effects	1 mg/m3
	Workers	Inhalation	Long-term local effects	1 mg/m3

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
sodium hypochlorite	Fresh water	0.00021 mg/l
	Marine water	0.000042 mg/l
	Effects on waste water treatment plants	0.03 mg/l
	Intermittent use/release	0.00026 mg/l

8.2 Exposure controls

Engineering measures

Ensure that eyewash stations and safety showers are close to the workstation location.
Apply technical measures to comply with the occupational exposure limits.

Personal protective equipment

Eye/face protection	:	Safety glasses with side-shields conforming to EN166
Hand protection		
Directive	:	The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
Remarks	:	Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0.70 mm) made by KCL or gloves from other manufacturers offering the same protection.
Skin and body protection	:	Work uniform or laboratory coat.
Respiratory protection	:	No personal respiratory protective equipment normally required. Breathing apparatus needed only when aerosol or mist is formed. Half mask with a particle filter P2 (EN 143)
Protective measures	:	Avoid contact with eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	yellow
Odour	:	slight chlorine
Odour Threshold	:	not determined
pH	:	12 - 13 (20 °C) Concentration: 100 %
Melting point/freezing point	:	ca. -15 °C
Decomposition temperature		No data available
Boiling point/boiling range	:	ca. 97 °C
Flash point	:	Not applicable
Evaporation rate	:	not determined
Upper explosion limit / Upper flammability limit	:	not determined
Lower explosion limit / Lower flammability limit	:	not determined
Vapour pressure	:	25 hPa (20 °C)
Relative vapour density	:	not determined
Density	:	1.07 g/cm3 (20 °C)
Solubility(ies)		

Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	not determined
Viscosity		
Viscosity, dynamic	:	< 10 mPa*s
Viscosity, kinematic	:	not determined
Explosive properties	:	not determined
Oxidizing properties	:	not determined

9.2 Other information

Flammability (liquids)	:	The product is not flammable.
Metal corrosion rate	:	Corrosive to metals
Self-ignition	:	Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.
Decomposes at elevated temperatures.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	May develop chlorine if mixed with acidic solutions. Exothermic reaction with strong acids. Gives off hydrogen by reaction with metals.

10.4 Conditions to avoid

Conditions to avoid	:	Temperatures greater than recommended storage temperature. Strong sunlight for prolonged periods. Do not mix with other products.

10.5 Incompatible materials

Materials to avoid	:	Incompatible with strong acids and oxidizing agents. Strong reducing agents Ammonium salts Possible incompatibility with alkali sensitive materials.

10.6 Hazardous decomposition products

Chlorine
Hydrogen chloride gas
Oxygen

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Components:

sodium hypochlorite:

Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat): > 10.5 mg/l Exposure time: 1 h Test atmosphere: vapour Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg Method: OECD Test Guideline 402

sodium hydroxide:

Acute oral toxicity	:	LD50 (Rat): > 2,000 mg/kg Remarks: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.
Acute inhalation toxicity	:	Remarks: No data available
Acute dermal toxicity	:	Remarks: No data available

Amines, C12-18-alkyldimethyl, N-oxides:

Acute oral toxicity	:	LD50 (Rat, female): 846 mg/kg

Skin corrosion/irritation

Causes severe burns.

Components:

sodium hypochlorite:

Species	:	Humans
Assessment	:	Skin corrosion
Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Corrosive after 3 minutes to 1 hour of exposure

sodium hydroxide:

Species	:	Rabbit

Result : Corrosive after 3 minutes or less of exposure

Amines, C12-18-alkyldimethyl, N-oxides:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Components:

sodium hypochlorite:

Species : Rabbit
Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

sodium hydroxide:

Species : Rabbit
Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

Amines, C12-18-alkyldimethyl, N-oxides:

Species : Rabbit
Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

sodium hypochlorite:

Test Type : Buehler Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.

sodium hydroxide:

Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Components:

sodium hypochlorite:

Genotoxicity in vitro	:	Test Type: Ames test Test system: Salmonella typhimurium Method: OECD Test Guideline 471 Result: negative
Genotoxicity in vivo	:	Test Type: Chromosome aberration test in vitro Species: Mouse Method: OECD Test Guideline 474 Result: negative
Germ cell mutagenicity- Assessment	:	Not mutagenic in Ames Test

sodium hydroxide:

Genotoxicity in vitro	:	Test Type: Micronucleus test Result: negative
Germ cell mutagenicity- Assessment	:	Not mutagenic in Ames Test

Carcinogenicity

Not classified based on available information.

Components:

sodium hypochlorite:

Carcinogenicity - Assessment	:	Based on available data, the classification criteria are not met.

sodium hydroxide:

Carcinogenicity - Assessment	:	No data available

Reproductive toxicity

Not classified based on available information.

Components:

sodium hypochlorite:

Effects on fertility	:	Species: Rat Application Route: Oral General Toxicity - Parent: NOAEL: 5 milligram per kilogram
Effects on foetal development	:	Species: Rat Application Route: Oral Teratogenicity: NOAEL: 5.7 mg/kg body weight
Reproductive toxicity - Assessment	:	Animal testing did not show any effects on fertility.

sodium hydroxide:

Reproductive toxicity - Assessment	:	No data available

STOT - single exposure

Not classified based on available information.

Components:

sodium hypochlorite:

Target Organs	:	Respiratory Tract
Assessment	:	May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Components:

sodium hypochlorite:

Assessment	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

sodium hypochlorite:

Species	:	Rat
NOAEL	:	50 mg/kg
Application Route	:	Oral
Exposure time	:	90-day
Method	:	OECD Test Guideline 408

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

Components:

sodium hypochlorite:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss): 0.06 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 0.026 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 0.05 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (algae): 0.002 mg/l Exposure time: 7 d

M-Factor (Acute aquatic toxicity)	:	10
Toxicity to fish (Chronic toxicity)	:	NOEC: 0.04 mg/l Exposure time: 28 d Species: Menidia peninsulae (tidewater silverside)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.007 mg/l Exposure time: 15 d Species: Lamellibranchia (mussel)
M-Factor (Chronic aquatic toxicity)	:	1

sodium hydroxide:

Toxicity to fish	:	LC50 (Gambusia affinis (Mosquito fish)): 125 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Ceriodaphnia dubia (water flea)): 40.4 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	Remarks: No data available

Ecotoxicology Assessment

Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.

Amines, C12-18-alkyldimethyl, N-oxides:

Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 0.143 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	:	1

Ecotoxicology Assessment

Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product:

Biodegradability	:	Remarks: No data available

Components:

sodium hypochlorite:

Biodegradability	:	Remarks: The product can be degraded by abiotic (e.g. chemical or photolytic) processes. Hydrolyses readily. The methods for determining biodegradability are not applicable to inorganic substances.

sodium hydroxide:

Biodegradability	:	Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Components:

sodium hypochlorite:

Bioaccumulation	:	Remarks: No data available
Partition coefficient: n-octanol/water	:	log Pow: -3.42 (20 °C)

sodium hydroxide:

Bioaccumulation	:	Remarks: Does not bioaccumulate.
Partition coefficient: n-octanol/water	:	log Pow: -3.88

12.4 Mobility in soil

Components:

sodium hypochlorite:

Mobility	:	Remarks: Mobile in soils, Hydrolyses readily.

sodium hydroxide:

Mobility	:	Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Endocrine disrupting potential	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number

ADR : UN 1791

IMDG : UN 1791

IATA : UN 1791

14.2 UN proper shipping name

ADR : HYPOCHLORITE SOLUTION

IMDG : HYPOCHLORITE SOLUTION

IATA : Hypochlorite solution

14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADR	8	
IMDG	8	
IATA	8	

14.4 Packing group

ADR

Packing group	:	III
Classification Code	:	C9
Hazard Identification Number	:	80
Labels	:	8
Tunnel restriction code	:	(E)

IMDG

Packing group	:	III
Labels	:	8
EmS Code	:	F-A, S-B

IATA (Cargo)

Packing instruction (cargo aircraft)	:	856
Packing instruction (LQ)	:	Y841
Packing group	:	III
Labels	:	Corrosive

IATA (Passenger)

Packing instruction (passenger aircraft)	:	852
Packing instruction (LQ)	:	Y841
Packing group	:	III
Labels	:	Corrosive

14.5 Environmental hazards

ADR
Environmentally hazardous : yes

IMDG
Marine pollutant : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17)	:	Conditions of restriction for the following entries should be considered: Number on list 3
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation	:	Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
UK REACH List of substances subject to authorisation (Annex XIV)	:	Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Not applicable

Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

The components of this product are reported in the following inventories:

TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AIIC : On the inventory, or in compliance with the inventory

DSL : This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.

		Amines, C12-18-alkyldimethyl
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

SECTION 16: Other information

Full text of H-Statements

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.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Met. Corr.	:	Corrosive to metals
Skin Corr.	:	Skin corrosion
Skin Irrit.	:	Skin irritation
STOT SE	:	Specific target organ toxicity - single exposure
2006/15/EC	:	Europe. Indicative occupational exposure limit values
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
2006/15/EC / STEL	:	Short term exposure limit
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration

associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:		**Classification procedure:**
Met. Corr. 1	H290	Based on product data or assessment
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 2	H411	Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.