SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issuing Date: 14-Dec-2022 **Revision Date:** 02-Feb-2023 **Revision Number** 1.01

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

1.1. Product identifier

Product Identifier	91445427_PGP_CLPR7_EUR
Product Name	P&G professional Flash C5 Concentrated disinfecting cleaner
Synonyms	PA00210522
Product Form	Mixture
Pure substance/mixture	Mixture

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

Recommended use	Restricted to professional users
Uses advised against	No information available
Main user category	SU 22 - Professional uses
Product category	Hypochlorite Bleach Specialty Cleaners Liquid
Use category	PC8 - Biocidal Products (e.g. disinfectants, pest control)

1.3. Details of the supplier of the safety data sheet

Supplier
Procter & Gamble UK Brooklands PGP, Weybridge, Surrey, KT13 0XP, UK Tel: 01932 896000 Fax: 01932 896200

P&G DCE bvba/sprl-Belgium Dist. Div., Temselaan 100, B-1853 Strombeek-Bever, Belgium (IE) 1800 535 119

For further information, please contact

E-mail address customerservice@pgprof.com

1.4. Emergency telephone number

Emergency Telephone (UK) Emergency Tel: 0800 328 8304 (IRL) Emergency Tel: 1800 509 497

(IRL) Poisons information: for information or to report a poisoning incident contact The National Poisons Information Centre 01 8092166 (8.00 a.m. to 10.00 p.m. 7 days a week)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 1 Sub-category A - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 3 - (H412)
Corrosive to metals	Category 1 - (H290)

2.2. Label elements

Signal word
Danger

Hazard statements
H314 - Causes severe skin burns and eye damage
H335 + H336 - May cause respiratory irritation. May cause drowsiness or dizziness
H400 - Very toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects
H335 - May cause respiratory irritation
H290 - May be corrosive to metals

Precautionary Statements - EU (§28, 1272/2008)
P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
P260 - Do not breathe vapours
P280 - Wear protective gloves/eye protection
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/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
P501 - Dispose of contents/container to an appropriate local waste system
P312 - Call a POISON CENTRE/doctor if you feel unwell

Additional information
This product requires tactile warnings if supplied to the general public. This product requires child resistant fastenings if supplied to the general public.

2.3. Other hazards

No information available.

Endocrine Disruptor Information There are no substances contained at or above the regulated value for declaration of >0.1% that fall under the definition of confirmed endocrine disruptors of any EU regulation.

SECTION 3: Composition/information on ingredients

3.1 Substances
Not applicable

3.2 Mixtures

Chemical name	CAS No	Weight-%	REACH registration number	EC No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Ethanolamine	141-43-5	5 - 10	01-2119486455-28	205-483-3	Acute Tox. 4 (Oral)(H302) Acute Tox. 4 (Dermal)(H312) Acute Tox. 4 (Inhalation)(H332) Skin Corr. 1B(H314) STOT SE 3(H335) Aquatic Chronic 3(H412)	STOT SE 3 :: 5%<=C<100 %	-	-
Didecyldimonium Chloride	7173-51-5	1 - 5	01-2119945987-15	230-525-2	Acute Tox. 3 (Oral)(H301) Skin Corr. 1B(H314)	-	10	-

					Eye Dam. 1(H318) Aquatic Acute 1(H400) Aquatic Chronic 2(H411)			
Alkyl Dimethyl Ethylbenzyl Ammonium Chloride	85409-23-0	1 - 5	No data available	287-090-7	Acute Tox. 4 (Oral)(H302) Skin Corr. 1B(H314) Aquatic Acute 1(H400) Aquatic Chronic 1(H410)	-	10	1
Benzalkonium Chloride	68391-01-5	1 - 5	No data available	269-919-4	Acute Tox. 4 (Oral)(H302) Skin Corr. 1B(H314) Aquatic Acute 1(H400) Aquatic Chronic 1(H410)	-	10	-
C9-11 Pareth-n	68439-46-3	1 - 5	No data available	614-482-0	Acute Tox. 4 (Oral)(H302) Eye Dam. 1(H318)	-	-	-
C12-14 Pareth-n	68439-50-9	1 - 5	01-2119487984-16	Polymer	Acute Tox. 4 (Oral)(H302) Eye Dam. 1(H318) Aquatic Chronic 3(H412)	-	-	-
Glycol	107-21-1	1 - 5	01-2119456816-28	203-473-3	Acute Tox. 4 (Oral)(H302) STOT RE 2(H373)	-	-	-

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

Acute Toxicity Estimate
No information available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59).

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Skin contact IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention.

Ingestion IF SWALLOWED:. Rinse mouth. Do NOT induce vomiting. Call a physician or poison

control center immediately.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

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

Symptoms Coughing and/ or wheezing. Redness. Swelling of tissue. Itching. Sneezing. Dryness. Pain. Blurred vision. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Excessive secretion.

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

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Scoop absorbed substance into closing containers. Do not use metal containers.

Methods for cleaning up Small quantities of liquid spill:. Large Spills:. contain released substance, pump into suitable containers. This material and its container must be disposed of in a safe way, and as per local legislation.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Avoid contact with eyes. Avoid contact with skin. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep only in the original container in a cool, well-ventilated place away from (strong) acids.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Ethanolamine	TWA: 1 ppm TWA: 2.5 mg/m³ *	TWA: 1 ppm TWA: 2.5 mg/m³ STEL 3 ppm STEL 7.6 mg/m³ Skin sensitizer	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ *	STEL: 3 ppm STEL: 7.6 mg/m³ TWA: 1 ppm TWA: 2.5 mg/m³ K*	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ *
Glycol	TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm STEL: 104 mg/m³ *	TWA: 10 ppm TWA: 26 mg/m³ STEL 20 ppm STEL 52 mg/m³ H*	*	STEL: 40 ppm STEL: 104 mg/m³ TWA: 52 mg/m³ TWA: 20 ppm K*	TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm STEL: 104 mg/m³ *

Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Ethanolamine	* STEL: 3 ppm STEL: 7.6 mg/m³ TWA: 1 ppm TWA: 2.5 mg/m³	TWA: 2.5 mg/m³ Ceiling: 7.5 mg/m³ *	TWA: 1 ppm TWA: 2.5 mg/m³ H*	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ A*	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ iho*
Glycol	* STEL: 40 ppm STEL: 104 mg/m³ TWA: 20 ppm TWA: 52 mg/m³	TWA: 50 mg/m³ Ceiling: 100 mg/m³ *	TWA: 10 ppm TWA: 26 mg/m³ TWA: 10 mg/m³ H*	TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm STEL: 104 mg/m³ A*	TWA: 20 ppm TWA: 50 mg/m³ STEL: 40 ppm STEL: 100 mg/m³ iho*

Chemical name	France	Germany	Germany DFG	Greece	Hungary
Ethanolamine	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ *	TWA: 0.2 ppm TWA: 0.5 mg/m³ H* Skin sensitizer	TWA: 0.2 ppm TWA: 0.51 mg/m³ Peak: 0.2 ppm Peak: 0.51 mg/m³ skin sensitizer	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ skin - potential for cutaneous absorption	TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ *
Glycol	TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm STEL: 104 mg/m³ *	TWA: 10 ppm TWA: 26 mg/m³ H*	TWA: 10 ppm TWA: 26 mg/m³ Peak: 20 ppm Peak: 52 mg/m³ *	TWA: 50 ppm TWA: 125 mg/m³ STEL: 50 ppm STEL: 125 mg/m³	TWA: 52 mg/m³ STEL: 104 mg/m³ *

Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Ethanolamine	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ Sk*	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ pelle*	TWA: 3 ppm TWA: 7.5 mg/m³ STEL: 6 ppm STEL: 15 mg/m³	TWA: 0.2 ppm TWA: 0.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ *	* TWA: 2.5 mg/m³ TWA: 1 ppm STEL: 7.6 mg/m³ STEL: 3 ppm
Glycol	TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm	TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m³	TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm	* TWA: 10 ppm TWA: 25 mg/m³

	STEL: 104 mg/m³ Sk*	STEL: 104 mg/m³ pelle*		STEL: 104 mg/m³ *	STEL: 20 ppm STEL: 50 mg/m³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Ethanolamine	* STEL: 3 ppm STEL: 7.6 mg/m³ TWA: 1 ppm TWA: 2.5 mg/m³	* STEL: 3 ppm STEL: 7.6 mg/m³ TWA: 1 ppm TWA: 2.5 mg/m³	TWA: 2.5 mg/m³ STEL: 7.6 mg/m³ H*	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 5 mg/m³ H*	STEL: 7.5 mg/m³ TWA: 2.5 mg/m³ *
Glycol	* STEL: 40 ppm STEL: 104 mg/m³ TWA: 20 ppm TWA: 52 mg/m³	* STEL: 40 ppm STEL: 104 mg/m³ TWA: 20 ppm TWA: 52 mg/m³	TWA: 52 mg/m³ TWA: 10 mg/m³ STEL: 104 mg/m³ H*	TWA: 20 ppm TWA: 52 mg/m³ STEL: 104 mg/m³ STEL: 40 ppm H*	STEL: 50 mg/m³ TWA: 15 mg/m³ *
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Ethanolamine	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ P*	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ *	TWA: 1 ppm TWA: 2.5 mg/m³ * Ceiling: 7.6 mg/m³	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: STEL ppm STEL: STEL mg/m³ *	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.5 mg/m³ vía dérmica*
Glycol	TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm STEL: 104 mg/m³ Ceiling: 100 mg/m³ P*	TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm STEL: 104 mg/m³ *	TWA: 20 ppm TWA: 52 mg/m³ * Ceiling: 104 mg/m³	TWA: 20 ppm TWA: 52 mg/m³ STEL: STEL ppm STEL: STEL mg/m³ *	TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm STEL: 104 mg/m³ vía dérmica*
Chemical name	Sweden	Switzerland	United Kingdom	Israel - Occupational Exposure Limits - TWAs	Turkey
Ethanolamine	NGV: 1 ppm NGV: 2.5 mg/m³ Bindande KGV: 3 ppm Bindande KGV: 7.5 mg/m³ *	TWA: 2 ppm TWA: 5 mg/m³ STEL: 4 ppm STEL: 10 mg/m³	TWA: 1 ppm TWA: 2.5 mg/m³ STEL: 3 ppm STEL: 7.6 mg/m³ Sk*	3ppmTWA	1ppmTWA 2.5mg/m³TWA
Glycol	NGV: 10 ppm NGV: 25 mg/m³ Bindande KGV: 40 ppm Bindande KGV: 104 mg/m³ *	TWA: 10 ppm TWA: 26 mg/m³ STEL: 20 ppm STEL: 52 mg/m³ H*	TWA: 10 mg/m³ TWA: 20 ppm TWA: 52 mg/m³ STEL: 40 ppm STEL: 104 mg/m³ STEL: 30 mg/m³ Sk*	25ppmTWA	20ppmTWA 52mg/m³TWA

Biological occupational exposure limits
This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) Long term.

Chemical name	Worker - dermal, long-term - systemic	Worker - inhalative, long-term - systemic	Worker - dermal, long-term - local	Worker - inhalative, long-term - local
Ethanolamine	3 mg/kg bw/day	1 mg/m³	-	0.51 mg/m³
C9-11 Pareth-n	2080 mg/kg bw/d	294 mg/m³	-	-
Glycol	106 mg/kg bw/day	-	-	35 mg/m³

Chemical name	Consumer - oral, long-term - local	Consumer - inhalative, long-term - local	Consumer - dermal, long-term - local
Ethanolamine	-	0.28 mg/m³	-
Glycol	-	7 mg/m³	-

Chemical name	Consumer - oral, long-term - systemic	Consumer - inhalative, long-term - systemic	Consumer - dermal, long-term - systemic

Ethanolamine	1.5 mg/kg bw/day	0.18 mg/m³	1.5 mg/kg bw/day
C9-11 Pareth-n	25 mg/kg bw/d	87 mg/m³	1250 mg/kg bw/d
Glycol	-	-	53 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Chemical name	Fresh Water	Marine water	Intermittent release
Ethanolamine	0.07 mg/L	0.007 mg/L	0.028 mg/L
Didecyldimonium Chloride	0.0011 mg/L	0.00011 mg/L	0.00021 mg/L
C9-11 Pareth-n	0.104 mg/L	0.104 mg/L	0.014 mg/L
Glycol	10 mg/L	1 mg/L	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment plant	Soil	Air	Oral
Ethanolamine	0.357 mg/kg sediment dw	0.036 mg/kg sediment dw	100 mg/L	1.29 mg/kg soil dw	-	-
Didecyldimonium Chloride	61.86 mg/kg sediment dw	6.186 mg/kg sediment dw	0.14 mg/L	1.4 mg/kg soil dw	-	-
C9-11 Pareth-n	13.7 mg/kg sediment dw	13.7 mg/kg sediment dw	1.4 mg/L	1 mg/kg soil dw	-	-
Glycol	37 mg/kg sediment dw	3.7 mg/kg sediment dw	199.5 mg/L	1.53 mg/kg soil dw	-	-

8.2. Exposure controls

Personal Protective Equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.

Environmental exposure controls Prevent that the undiluted product reaches surface waters.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance Liquid
Color colored
Odor Odorless
Odor threshold No information available

Property	Values	Remarks • Method
Melting point / freezing point	No data available	Not available. This property is not relevant for the safety and classification of this product
Initial boiling point and boiling range	100 °C	
Flammability		Not applicable. This property is not relevant for liquid product forms
Flammability Limit in Air		Not available. This property is not relevant for the safety and classification of this product No Data Available
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No Flash to Boiling (NFTB)	
Autoignition temperature	No data available	Not applicable. This property is not relevant for liquid product forms
Decomposition temperature	No Data Available	Not available. This property is not relevant for the safety and classification of this product
pH	11.25	
Dynamic viscosity	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Water solubility	Soluble in water	
Solubility(ies)	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Partition coefficient	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Vapor pressure	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Relative density	No Data Available	Not available. This property is not relevant for the safety and classification of this product
Relative vapor density	No data available	Not applicable. This property is not relevant for liquid product forms
Particle characteristics		Not available. This property is not relevant for the safety and classification of this product
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes
No information available

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Contact with acids liberates toxic gas. If the product is involved in a fire, it can release toxic chlorine gases.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials Metals.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. May cause irritation of respiratory tract. May cause drowsiness or dizziness.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.

Ingestion Specific test data for the substance or mixture is not available. Causes burns. (based on components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	2,173.10 mg/kg
ATEmix (dermal)	14,966.00 mg/kg
ATEmix (inhalation-dust/mist)	20.0528926531 mg/l
ATEmix (inhalation-vapor)	111.60 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethanolamine	1089 mg/kg bw (OECD 401)	= 1000 mg/kg (Rabbit)	> 1.3 mg/L (Rat) 6 h
Didecyldimonium Chloride	264 mg/kg bw (OECD 401)	3342 mg/kg bw	-
Quaternary ammonium compounds,	-	= 2300 mg/kg (Rabbit)	-

C12-14-alkyl((ethylphenyl)methyl)dimethyl, chlorides			
C12-18 Alkyldimethylbenzyl Ammonium Chloride	>300-2000 mg/kg bw	= 2300 mg/kg (Rabbit) = 1420 mg/kg (Rat)	-
C9-11 Pareth-8	> 300 - < 2000 mg/kg bw	> 2000 mg/kg bw	-
Alcohols, C12-14, ethoxylated (n=7)	>300-2000 mg/kg bw (Rat)	> 5000 mg/kg bw	-
ethane-1,2-diol	= 4700 mg/kg (Rat)	5001 mg/kg (rat)	> 2.5 mg/L air

Chemical name	Carcinogenicity	Species	Eye Damage	Species	Developmental toxicity	Species	Mutagenicity	Species
Ethanolamine	-	-	Y (OECD 405)	-	-	-	-	-
Didecyldimonium Chloride	-	-	Y	-	-	-	-	-
C9-11 Pareth-n	-	-	Y (100%; OECD 405)	-	-	-	-	-

Chemical name	Reproductive toxicity	Species	Skin corrosion/irritation	Species	Sensitization	Species
Ethanolamine	-	-	Y (OECD 404)	-	-	-
Didecyldimonium Chloride	-	-	Y (OECD 404)	-	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes severe burns.

Serious eye damage/eye irritation Risk of serious damage to eyes.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure May cause respiratory irritation.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Unknown aquatic toxicity Contains 0.00813 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethanolamine	2.8 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	349 mg/L (Cyprinus carpio; 96 h)	> 1000 mg/L (OECD 209; activated sludge, domestic; 30 min)	27.04 mg/L (OECD 202; Daphnia magna; 48 h)
Didecyldimonium Chloride	0.062 mg/L (OECD 201; Pseudokirchneriella subcapitata; 72 h)	0.49 mg/L (OECD 203; Danio rerio; 96 h)	5.95 mg/l (OECD 209; activated sludge; static; 3 h)	0.029 mg/L (OECD 202; Daphnia magna; 48 h)
C12-18 Alkyldimethylbenzyl Ammonium Chloride	-	LC50: 0.223 - 0.46mg/L (96h, Lepomis macrochirus) LC50: 0.823 - 1.61mg/L (96h, Oncorhynchus mykiss) LC50: =1.3mg/L (96h, Poecilia reticulata) LC50: =2.4mg/L (96h, Oryzias latipes)	-	0.016 mg/l
C9-11 Pareth-8	1.4 mg/L (Pseudokirchneriella subcapitata; 96 h)	5 mg/L (Oncorhynchus mykiss; 96 h)	-	2.5 mg/L (Daphnia magna; 48 h)
Alcohols, C12-14, ethoxylated (n=7)	>1-10 mg/L (OECD 201; Desmodesmus subspicatus (green algae); static test)	>1-10 mg/L (OECD 203; Cyprinus carpio; flow-through test)	-	> 1 - 10 mg/L (OECD 202; Daphnia magna; static test)
ethane-1,2-diol	10940 mg/L (EPA/600/4-89/001; Pseudokirchneriella subcapitata; 96 h)	> 72860 mg/L (EPA 600/4-90/027; Pimephales promelas; 96 h)	-	> 100 mg/L (OECD 202; Daphnia magna; 48 h)

Chronic Toxicity

Chemical name	Toxicity to algae (NOEC or ECx)*	Toxicity to fish (NOEC or ECx)*	Toxicity to daphnia and other aquatic invertebrates (NOEC or ECx)*	Toxicity to Microorganisms (NOEC or ECx)*	Toxicity to other organisms
Ethanolamine	1 mg/L (OECD 201; Pseudokirchneriella subcapitata; 3 d)	1.24 mg/L (OECD 210; Oryzias latipes; 41 d)	0.85 mg/L (OECD 202; Daphnia magna; 21 d)	-	-
Didecyldimonium Chloride	0.013 mg/L (OECD 201; Pseudokirchneriella subcapitata; 3 d)	-	0.021 mg/L (OECD 211; Daphnia magna; 21 d)	-	125 mg/kg soil dw (OECD 222 and BBA guideline, 1994; Eisenia fetida; based on active ingredient; 55 d)
C9-11 Pareth-n	-	0.11 mg/L (Pimephales promelas; 30 d)	0.77 mg/L (Daphnia magna; 21 d)	-	-
Glycol	> 100 mg/L (OECD	32000 mg/L (EPA	24000 mg/L (EPA	-	-

	201; Pseudokirchneriella subcapitata; 3 d)	600/4-89/001; Pimephales promelas; 7 d)	600/4-89/001; Ceriodaphnia dubia; 7 d)		

12.2. Persistence and degradability

Persistence and degradability

Chemical name	Ready Biodegradation Test (OECD 301)	Abiotic Degradation Hydrolysis	Abiotic Degradation Photolysis	Biodegradation Other Tests
Ethanolamine - 141-43-5	> 90%; DOC; OECD 301 A; 21 d)	-	-	> 70 % (OECD 301 F; aerobic; activated sludge, domestic, non-adapted; no information provided regarding 10 d window criteria)
Didecyldimonium Chloride - 7173-51-5	71%CO2; OECD 301 B; 28 d	-	-	t1/2: 100 d (Guideline not indicated; method: Technical Assistance Document 3.12 of the Environmental Assessment Handbook, FDA; aerobic; in loam soil)
C9-11 Pareth-8 - 68439-46-3	72 % inorg. C analysis (Guideline: ISO 14593 Water quality; 28 d)	-	-	-
Alcohols, C12-14, ethoxylated (n=7) - 68439-50-9	> 70 % (OECD 301 A (new version); 28 d; aerobic) and > 60 %(OECD 301 B; 28 d; aerobic)	-	-	-
ethane-1,2-diol - 107-21-1	90% - 100% DOC; OECD 301 A; 10 d	-	-	-

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Ethanolamine	-2.3
Didecyldimonium Chloride	-0.4 - 2.58
Glycol	-1.36

Chemical name	Octanol/water partition coefficient	Bioconcentration factor (BCF)
Ethanolamine	-2.3	9.2 L/kg
Didecyldimonium Chloride	2.59 (OECD 105)	-
C9-11 Pareth-n	3.74	237 L/Kg
Glycol	1.36	-

12.4. Mobility in soil

Mobility in soil No information available.

Chemical name	log Koc
Ethanolamine	>= 221 - <= 491 L/kg
Didecyldimonium Chloride	280547 L/kg (OECD 106)
Glycol	1 L/kg

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
Ethanolamine	The substance is not PBT / vPvB PBT assessment does not apply
Didecyldimonium Chloride	The substance is not PBT / vPvB
Alkyl Dimethyl Ethylbenzyl Ammonium Chloride	The substance is not PBT / vPvB
C9-11 Pareth-n	The substance is not PBT / vPvB
C12-14 Pareth-n	The substance is not PBT / vPvB PBT assessment does not apply
Glycol	The substance is not PBT / vPvB PBT assessment does

	not apply

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products The waste codes/waste designations below are in accordance with EWC. Waste must be delivered to an approved waste disposal company. Waste is to be kept separate from other types of waste until its disposal. Do not throw waste product into the sewer. Where possible recycling is preferred to disposal or incineration. Empty, uncleaned packaging need the same disposal considerations as filled packaging.

Contaminated packaging Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV 20 01 29* - detergents containing dangerous substances
15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

IATA

14.1 UN number or ID number UN1903
14.2 UN proper shipping name DISINFECTANT, LIQUID, CORROSIVE, N.O.S.(Ethanolamine, Didecyldimonium chloride)
14.3 Transport hazard class(es) 8
14.4 Packing group III
Description UN1903, DISINFECTANT, LIQUID, CORROSIVE, N.O.S.(Ethanolamine, Didecyldimonium chloride)
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions A3, A803
Note: The shipper is responsible for identifying any exemptions, including Limited Quantity, that may apply based on package size.

IMDG

14.1 UN number or ID number UN1903
14.2 UN proper shipping name DISINFECTANT, LIQUID, CORROSIVE, N.O.S.(Ethanolamine, Didecyldimonium chloride)
14.3 Transport hazard class(es) 8
14.4 Packing group III
Description UN1903, DISINFECTANT, LIQUID, CORROSIVE, N.O.S.(Ethanolamine, Didecyldimonium chloride)
14.5 Environmental hazards Yes
14.6 Special precautions for user
Special Provisions 223, 274
EmS-No F-A, S-B
14.7 Maritime transport in bulk according to IMO instruments No information available
Note: The shipper is responsible for identifying any exemptions, including Limited Quantity, that may apply based on package size.

RID

14.1 UN number or ID number UN1903
14.2 UN proper shipping name DISINFECTANT, LIQUID, CORROSIVE, N.O.S.(Ethanolamine, Didecyldimonium chloride)
14.3 Transport hazard class(es) 8
14.4 Packing group III

Description	UN1903, DISINFECTANT, LIQUID, CORROSIVE, N.O.S.(Ethanolamine, Didecyldimonium chloride), 8, III, Environmentally Hazardous
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274
Classification code	C9

ADR

14.1 UN number or ID number	UN1903
14.2 UN proper shipping name	DISINFECTANT, LIQUID, CORROSIVE, N.O.S.(Ethanolamine, Didecyldimonium chloride)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
Description	UN1903, DISINFECTANT, LIQUID, CORROSIVE, N.O.S.(Ethanolamine, Didecyldimonium chloride), 8, III, Environmentally Hazardous
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274
Classification code	C9
Tunnel restriction code	(E)

ADN

14.1 UN number or ID number	UN1903
14.2 Extended proper shipping name	DISINFECTANT, LIQUID, CORROSIVE, N.O.S.(Ethanolamine, Didecyldimonium chloride)
Description	UN1903, DISINFECTANT, LIQUID, CORROSIVE, N.O.S.(Ethanolamine, Didecyldimonium chloride), 8, III, Environmentally Hazardous
14.3 Transport hazard class(es)	8
14.4 Packing group	III
14.5 Marine pollutant	Not regulated
Classification code	C9
Hazard label(s)	8
Limited quantity (LQ)	5 L
Equipment Requirements	PP, EP

SECTION 15: Regulatory information

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

National regulations

France
Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Ethanolamine	RG 49,RG 49bis	-
Glycol	RG 84	-

Germany
Water hazard class (WGK) obviously hazardous to water (WGK 2)

Netherlands

Poland
Announcement of the Speaker of the Sejm of the Republic of Poland of 13 April 2018 regarding the publication of a uniform text of the Act - Labor Code (Journal of Laws 2018, item 917, as amended).Announcement of the Speaker of the Sejm of the Republic of Poland of March 15, 2019 regarding the publication of a uniform text of the Act on Waste (Journal of Laws 2019 item 701, as amended).Regulation of the Minister of Development of 7 July 2016, repealing the Regulation on specific requirements for certain products due to their negative environmental impact (Journal of Laws of 2016, item 1099, as amended).Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 regarding the highest permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286 with subsequent amendments).

European Union
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents

at work.

Authorizations and/or restrictions on use:
This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)
Regulation (EC) No. 648/2004 (Detergents regulation) Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP] Registration, Evaluation, Authorization, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006) EU - Biocides Directive (98/8/EC) - Active Substances

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Ethanolamine	75.	-
Didecyldimonium Chloride	75.	-

Persistent Organic Pollutants
Not applicable

Export Notification requirements
This product contains substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals

Chemical name	European Export/Import Restrictions per (EC) 689/2008 - Annex Number
Didecyldimonium Chloride - 7173-51-5	I.1

Dangerous substance category per Seveso Directive (2012/18/EU)
E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable

EU - Biocides

Chemical name	EU - Biocides
Didecyldimonium Chloride - 7173-51-5	Product-type 8: Wood preservatives

CESIO Recommendations 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.

15.2. Chemical safety assessment

Chemical Safety Report No chemical safety assessment has been carried out for this mixture per REACH regulation.

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
H301 - Toxic if swallowed
H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H373 - May cause damage to organs through prolonged or repeated exposure
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

H412 - Harmful to aquatic life with long lasting effects

Legend
SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
STOT - single exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Corrosive to metals	On basis of test data

Issuing Date: 14-Dec-2022

Revision Date: 02-Feb-2023

Further information Salts listed in Section 3 without a REACh Registration number are exempt, based on Annex V.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
Disclaimer
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.

End of Safety Data Sheet