Safety Data Sheet

According to Regulation (EC) No. 1907/2006 – Annex II modified

1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 - Product identifier

Trade name: **CLEAN MOTO**
Usual chemical name: None.
Reach number: Not concerned (mixture).

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

Use of the preparation: Cleaning agent.

1.3 - Details of the supplier of the safety data sheet

Manufacturer:	**CB Distribution** 68 boulevard Carnot F-06 400 Cannes – France	Phone: 33 (0)4 83 09 36 86 E-mail: cbdistribution@outlook.com
Contact person SDS:	CB Distribution 68 boulevard Carnot F-06 400 Cannes – France	Phone: 33 (0)4 83 09 36 86 E-mail: cbdistribution@outlook.com

1.4 - Emergency telephone number

Country	Official authority	Adress	Emergency tel. N°
BELGIUM	Centre Anti-Poisons/Antigifcentrum – Hôpital Militaire Reine Astrid - Bruxelles	www.centreantipoisons.be	+32 70 245 245
FRANCE	Centre Antipoison et de Toxicovigilance de Paris – Hôpital Fernand Widal 24/24h	www.centres-antipoison.net	+33 1 40 05 48 48
FRANCE	INRS – Institut National de Recherche et de Sécurité	www.inrs.fr	+33 1 45 42 59 59
GREECE	Poisons Information Centre – Children's Hospital "Aglaia. Kyriakou"	11527 Athens	+30 1 07 79 37 77
ITALIA	Centro Antiveleni Ospedale Niguarda (MI) 24 ore su 24	www.centroantiveleni.org	+39 02 66 10 10 29
NETHERLANDS	Nationaal Vergiftigingen Informatie Centrum – Utrecht	www.vergiftigingen.info	+31 3 02 74 88 88
SPAIN	Número telef. de emergencia 24 Horas Instituto Nacional de Toxicología:		+34 9 00 18 15 66 +34 9 15 62 04 20
WORLDWIDE	World directory of poisons centres (Yellow Tox)	Website – WHO-OMS	www.who.int/ipcs/poisons/centre/directory/en

2 - HAZARDS IDENTIFICATION

The mixture is regulated in agreement with the European Regulation 1272/2008/EC, its adaptations and its annexes.

2.1 - Classification of the substance or mixture

Classification (Regulation (EC) No 1272/2008) and its adaptations
Corrosive to metals, Category 1, (Met. Corr. 1, H290).
Skin corrosion, Category 1B, (Skin Cor. 1B, H314).
Serious eye damage, Category 1, (Eye Dam. 1, H318).
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.
For the full text of the H-Statements mentioned in this Section, see Section 16

Classification (Directives 67/548/EEC, 1999/45/EC) and adaptations
Corrosive to metals.
Corrosive for the skin, (C, R34).
Corrosive for the eyes, (Xi, R41).
This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.
For the full text of the R-phrases mentioned in this Section, see Section 16.

Principal hazards:

Harmful effects on health:	Corrosive for the eyes and the skin. Cause burns. Risk of serious damage to eyes.
Effects on the environment:	Not classified as dangerous for the environment. Basic mixture: The damaging effects are mostly a consequence of the increase in pH.
Physical and chemical hazards:	Corrosive to metals. Reacts with most metals to form flammable hydrogen gas. Exothermic reactions in contact with water and strong acids.
Classification system:	The classification corresponds to current EEC lists and is completed by indications extracted from specialized publications and indications supplied by the suppliers.

2.2 - Label elements

Detergent mixture (see section 15).

Label according Regulation (EC) No 1272/2008) and its adaptations*

Hazard Pictograms:

GHS05

Signal word: **DANGER**

Hazard statements and supplemental hazard information:

H290:	May be corrosive to metals.
H314:	Causes severe skin burns and eye damage.

Precautionary statements - Prevention:

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 container.
P260:	Do not breathe dust/fume/gas/mist/vapours/spray.
P264:	Wash hands thoroughly after handling.
P280:	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response:

P301 +P330 + P331:	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353:	IF ON SKIN (or hair): Remove/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.
P304 + P340:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310:	Immediately call a POISON CENTER or doctor/physician.
P363:	Wash contaminated clothing before reuse.
P390:	Absorb spillage to prevent material damage.

Precautionary statements - Storage:

P405:	Store locked up.

Precautionary statements - Disposal

P501:	Dispose of contents/container to an approved waste disposal plant in accordance with local/regional/national/international regulation.

Component to be mentioned on the label:
Contents quaternary alkyl amine (CAS 863679-20-3), ethoxylated alcohol (CAS 160875-66-1), EDTA (CAS 64-02-8), sodium hydroxide (CAS 1310-73-2) and potassium hydroxide (CAS 1310-58-3) in solution.

Label according Regulation EC No 648/2004 and its amendments
< 5 % - Non-ionic surfactants.
< 5 % - Anionic surfactants.
< 5 % - Phosphates.
< 5 % - EDTA.

2.3 - Other hazards
Physical-Chemical Properties:
Can be corrosive for metals. The contact with strong acids can cause violent reactions or explosion. Exothermic reaction with water.
Properties affecting health:
No other hazard was highlighted currently.

3 - COMPOSITION / INFORMATION ON INGREDIENTS
3.2 - Mixtures
Chemical nature: Alkaline mixture containing less of 3 % quaternary alkyl amine.
Hazardous ingredients:

Substance	CAS N°	EC N°	REACH N°	Index EC N°	% w/w
Quaternary coco alkyl methyl amine ethoxylate methyl chloride	863679-20-3		Detergent		≤ 3 %
Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy-	160875-66-1	NLP *605-233-7	Detergent 02-2119549160-47		≤ 3 %
Tetrasodium ethylene diamine tetraacetate	64-02-8	200-573-9	01-2119486762-27	607-428-00-2	≤ 3 %
Tetrapotassium pyrophosphate	7320-34-5	230-785-7	01-2119489369-18		≤ 2 %
Sodium hydroxide	1310-73-2	215-185-5	01-2119457892-27	011-002-00-6	≤ 1.5 %
Potassium hydroxide	1310-58-3	215-181-3	01-2119487136-33	019-002-00-8	≤ 1.5 %
Disodium metasilicate (Na_2O_3Si)	6834-92-0	229-912-9	01-2119449811-37	014-010-00-8	≤ 1.5 %

* Substances without an existing EC: EC-number has been provided to make registration easier.

Substance	CAS N°	OEL	Classification in accordance with Directive 67/548/CE	Classification in accordance with Regulation 1272/2008/CE	% w/w
Quaternary coco alkyl methyl amine ethoxylate methyl chloride	863679-20-3		Xn; R22 Xi; R38-R41	Acute Tox. 4 – H302 Skin Irrit. 2 – H315 Eye Dam. 1 – H318	≤ 3 %
Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy-	160875-66-1		Xn ; R22 Xi ; R41	Acute Tox. 4 – H302 Eye Dam. 1 – H318	≤ 3 %
Tetrasodium ethylene diamine tetraacetate	64-02-8		Xn ; R48/20/22 Xi ; R41	Acute Tox. 4 – H302 Eye Dam. 1 – H318 Acute Tox. 4 – H332 STOT RE 2 – H373	≤ 3 %
Tetrapotassium pyrophosphate	7320-34-5		Xi ; R36/37/38	Eye Irrit. 2 – H319 Skin Irrit. 2 – H315 STOT SE 3 – H335	≤ 2 %

Substance	CAS N°	OEL	Classification in accordance with Directive 67/548/CE	Classification in accordance with Regulation 1272/2008/CE	% w/w
Sodium hydroxide	1310-73-2	VLE France : 2 mg/m³. TLV-TWA USA : 2 mg/m³ Skin Corr. 1A : H314: C ≥5 % Skin Corr. 1B H314: 2 % ≤C <5 % Skin Irrit. 2 : H315: 0,5% ≤C<2% Eye Irrit. 2 : H319: 0,5% ≤C <2%	C ; R35	Skin Corr. 1A – H314 Met. Corr. 1 – H290	≤ 1.5 %
Potassium hydroxide	1310-58-3	VLE France : 2 mg/m³. TLV-TWA USA : 2 mg/m³ Skin Corr. 1A : H314: C ≥5 % Skin Corr. 1B H314: 2 % ≤C <5 % Skin Irrit. 2 : H315: 0,5% ≤C<2% Eye Irrit. 2 : H319: 0,5% ≤C <2%	Xn ; R22 C ; R35	Acute Tox. 4 – H302 Skin Corr. 1A – H314 Met. Corr. 1 – H290	≤ 1.5 %
Disodium metasilicate (Na_2O_3Si)	6834-92-0		C ; R34 Xi ; R37	Skin Corr. 1B – H314 STOT SE 3 – H335 Met. Corr. 1 – H290	≤ 1.5 %

For the full text of the R and H phrases mentioned in this Section, see Section 16.

Complementary data: The mixture does not contain others dangerous substances higher than 0.1%.
The mixture composition is shown for health, safety and environmental use and is not intended to form any part of a specification.

4 - FIRST AID MEASURES

4.1 - Description of first aid measures

General advice: Immediately remove contaminated clothing and shoes.

Inhalation: In case of exposure, remove the subject from the contaminated zone and bring it to the fresh air. Administer oxygen or perform artificial respiration if necessary. If the person is unconscious, place in side position of safety and call a medical ambulance. If the symptoms persist, obtain immediately medical advice.

Skin contact: Immediately remove contaminated clothing and shoes.
Wash immediately and abundantly exposed skin with soap and plenty of water. Rinse with plenty of water 15-20 minutes.
Seek medical attention if irritation develops.

Eye contact: Immediately flush eyes with large amounts of running water for at least 15 minutes, holding eyelids open.
Remove any contact lenses after the first 5 minutes. Continue to wash with water holding eyelids open.
In all the cases, consult an ophthalmologist, even in the absence of apparent damage.

Ingestion: Do not induce vomiting.
Only when conscious, rinse mouth; give plenty of water to drink (approx.500 ml). Nothing to give to drink to unconscious subject.
Obtain medical attention immediately.

Protection of the first aid responders: The first-aid responders will have to take precautions to avoid the exposure and to carry protection equipments.

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

Inhalation: May cause burns to mucous membranes. May cause irritation of the respiratory tract.

Skin contact: Corrosive for the skin. Causes severe burns. Redness, pain. Tissue swelling.
Untreated wounds from corrosion of the skin heal slowly and with difficulty.
Projections may cause severe burns whose severity depends on the time of contact with the preparation.
Skin irritation, if untreated may be prolonged and serious (eg necrosis). This may be prevented by early treatment with medium strength corticosteroid.

Eye contact: Corrosive for the eyes. Causes severe burns. Risk of serious permanent eye damage if the product is not removed quickly.
Irritation, whimpering, redness.
Prompt action is essential for eye contact. Small amounts splashed into eyes can cause irreversible tissue damage and blindness.

Ingestion: Severe burns of the mouth, throat and gastrointestinal tract, as well as a danger of perforation of the esophagus and the stomach. May cause severe digestive tract irritation with abdominal pain, nausea, vomiting and diarrhea.

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

Medical information: In case of splashing into the eyes and face, treat eyes first.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
No specific antidote. Symptomatic treatment and supportive therapy as indicated.

5 - FIREFIGHTING MEASURES

5.1 - Extinguishing media

Suitable extinguishing media: Water spray, Foam, Dry power extinguishers.
Unsuitable extinguishing media: None to our knowledge.

5.2 - Special hazards arising from the substance or mixture

Special exposure hazard in fire: Thermal decomposition generates toxic products such as carbon oxides, phosphorus oxides, potassium oxides and toxic and irritating fumes.

Explosion hazard: In contact with certain metals, releases of flammable hydrogen gas which can form an explosive mixture with air.

Hazardous reactions: Exothermic reaction with water and acids.

5.3 - Advice for firefighters

Required special equipment: Because of the toxicity of the produced gas during the thermal decomposition of the products, the firefighters will be equipped with self contained breathing apparatus.

Additional indications: Do not breathe fumes.
Use water spray to cool fire-exposed containers.

6 - ACCIDENTAL RELEASE MEASURES

6.1 - Personal precautions, protective equipment and emergency procedures

General Information:
Avoid direct contact with released material.
Evacuate non-essential personnel.
Ensure adequate ventilation.
Keep away materials and products which are incompatible with the product.
Risk for slippery floors if spilled out..

Advice for non-emergency personnel: Do not touch or walk through spilled material.
Avoid all unnecessary exposure.
Avoid contact with skin and eyes.
Avoid inhalation of gases, vapours, fumes or aerosols.
If spillage occurs on the public highway, indicate the danger and notify the local authorities.
Evacuate and limit access.

Advice for emergency responders: For personal protection see section 8.
If spillage occurs on the public highway, indicate the danger and notify the local authorities.
Evacuate the danger area.
Stop the leak.
Use water spray to disperse gas or vapour.

Personal precautions:
Avoid inhalation of gases, vapours, fumes or aerosols.
Avoid contact with skin and eyes.
Remove contaminated clothes as soon as possible.
In case of large spillage, the cleaning procedure should be carried out using suitable protective clothing such as overall, gloves and boots.

6.2 - Environmental precautions

Prevent from spills to enter and spread into soil, drain, and drinking waters by absorption of the leaking product on an inert material.
Do not reject as such into the natural environment or water without preliminary neutralization to pH 7
Inform respective authorities in case of seepage into water course or sewage system.

6.3 - Methods and material for containment and cleaning up

Methods for Containment:
Keep away materials and products which are incompatible with the product.
Shut off leaks, if possible without personal risks.
Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, Kieselguhr, vermiculite).
Recover the product in a salvage container suitably labelled and alkali resistant.
Dispose according to local / national regulations (see Section 13).

Methods for cleaning up:
Neutralize with dilute hydrochloric acid.
Remove last traces by diluting with plenty of water.
Do not flush into surface water or sanitary sewer system. Transfer recovered product and other materials to suitable tanks or containers and store/dispose according to relevant regulations.

6.4 - Reference to other sections

Personal protective equipment: See section 8.
Waste disposal: See section 13.

7 - HANDLING AND STORAGE

7.1 - Precautions for safe handling

Technical measures:
Provide water supplies, eyewash fountains and safety showers in the vicinity.
Wear suitable protective clothing, gloves and chemical goggles.
Provide adequate ventilation, especially in confined areas.
Avoid inhalation of gases, vapours, fumes or aerosols.
Keep away from incompatible product.
Use only materials resistant to alkali.

Fire and explosion protection:
Usual preventive measures for the fire-protection.
Keep away from incompatible product.
Avoid contact with water, acids, and strong oxidising agents.
Avoid contact with metals.
Remove all sources of ignition - Do not smoke near the product.

Precautions to be taken:
Wear personal protective equipment.
Avoid any direct contact with eyes and skin.
Do not swallow.
Do not breathe gas/fumes/vapours/spray.

Other cautions:
Handle in accordance with the general rules of industrial safety.
Avoid any spillage onto the floor.
Maintain the buildings and the working stations in a perfect state of cleanliness.
In case of dilution, add the product in water, never the reverse (risk of projections).
Handle and open the container with prudence.
Do not mix with incompatible materials (see list in section 10).

Hygiene practice:
Remove immediately from skin, eyes or clothing.
Wash immediately any affected parts of the body.
When using do not eat, drink or smoke.
Keep away from food, drink and animal feeding stuffs.
Remove immediately soaked or soiled clothing.
Wash contaminated clothing before re-using.

7.2 - Conditions for safe storage, including any incompatibilities

Technical measures:
Do not remove the hazard labels of the containers (even if they are empty).
Use only materials resistant to alkalis.

Storage conditions:

Recommended:
Store only in the origin container, hermetically sealed, in a fresh (< 40°C), dry and well ventilated place.
Keep away from food, drink and animal feeding stuffs.

Unrecommended:
Protect from the strong heat and direct sunlight.

Incompatible matters:
Avoid the strong oxidising agents, strong acids and metals.
React with copper, aluminium, zinc and their alloys.
See detailed list of the incompatible matters, in section 10: "Stability - reactivity".

Packing materials:

Recommended:
Stainless steel 1.4401 (V4), stainless steel 1.4301 (V2), strengthening with a lay-up of fiberglass, high density polyethylene (HDPE), low density polyethylene (LDPE), glass.

Not Recommended:
Aluminium, copper, zinc and their alloys.
Rubbers.
Do not store in metallic containers not protected.

7.3 - Specific end use(s)

No particular or specific use of the mixture is known of the supplier to date.

8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 - Control parameters

Occupational exposure limits (Europeans and French):

Substance	N° CAS	Values
Potassium hydroxide	1310-58-3	VLE France: 2 mg/m^3. TLV-TWA USA: 2 mg/m^3.
Sodium hydroxide	1310-73-2	VLE France: 2 mg/m^3. TLV-TWA USA: 2 mg/m^3.

Periodically controls of atmosphere must be carried out.

Other data:

Substance: Tetrasodium ethylene diamine tetraacetate (CAS 64-02-8).

Value	Notes
DNEL = 2.5 mg/m^3	Final use: Workers Route of exposure: Inhalation Potential effects on health: Long term - systemic and local effects.
DNEL = 2.5 mg/m^3	Final use: Workers Route of exposure: Inhalation Potential effects on health: Short term - systemic and local effects.
DNEL = 1.5 mg/m^3	Final use: Consumers Route of exposure: Inhalation Potential effects on health: Long term - systemic and local effects.
DNEL = 1.5 mg/m^3	Final use: Consumers Route of exposure: Inhalation Potential effects on health: Short term - systemic and local effects.
DNEL = 25 mg/kg pc/d	Final use: Consumers Route of exposure: Oral Potential effects on health: Long term - systemic effects.
PNEC = 2.2 mg/L	Fresh water: the derivation is based on the free acid.
PNEC = 0.22 mg/L	Sea water: the derivation is based on the free acid.
PNEC = 1.2 mg/L	Intermittent release: the derivation is based on the free acid.
PNEC = 43 mg/L	Sewage treatment plant: the derivation is based on the free acid.
PNEC = 0.72 mg/kg	Soil: the derivation is based on the free acid.

Potassium hydroxide (CAS 1310-58-3): INRS Toxicological Sheet n° 35.

Value	Notes
DNEL = 1 mg/m³	Final use: Workers Route of exposure: Inhalation Potential effects on health: Long term - local effects
DNEL = 1 mg/m³	Final use: Consumers Route of exposure: Inhalation Potential effects on health: Long term - local effects

Sodium hydroxide (CAS 1310-73-2): INRS Toxicological Sheet n° 20

Value	Notes
DNEL = 1 mg/m³	Final use: Workers Route of exposure: Inhalation Potential effects on health: Long term - local effects

Value	Notes
DNEL = 1 mg/m³	Final use: Consumers Route of exposure: Inhalation Potential effects on health: Long term - local effects

Pyrophosphate tetrapotassique (CAS 7320-34-5).

Valeur	Remarques
DNEL = 2.79 mg/m^3	Final use: Workers Route of exposure: Inhalation Potential effects on health: Long term - systemic effects.
DNEL = 0.68 mg/L	Final use: Consumers Route of exposure: Inhalation Potential effects on health: Long term - systemic effects.
DNEL > 70 mg/kg pc/d	Final use: Consumers Route of exposure: Oral Potential effects on health: Long term - systemic effects.
PNEC = 0,05 mg/L	Fresh water (AF = 2000).
PNEC = 0,005 mg/L	Sea water (AF = 20000).
PNEC = 0,5 mg/L	Intermittent release (AF = 200).
PNEC = 50 mg/L	Sewage treatment plant (AF = 20).

Disodium metasilicate (CAS 6834-92-0): INRS Toxicological Sheet n° 259.

Value	Notes
DNEL = 6.22 mg/m³	Final use: Workers Route of exposure: Inhalation Potential effects on health: Long term - systemic effects.
DNEL = 1.49 mg/kg pc/d	Final use: Workers Route of exposure: Dermal Potential effects on health: Long term - systemic effects.
DNEL = 1.55 mg/m³	Final use: Consumers Route of exposure: Inhalation Potential effects on health: Long term - systemic effects.
DNEL = 0.74 mg/kg pc/d	Final use: Consumers Route of exposure: Dermal Potential effects on health: Long term - systemic effects.
DNEL = 0.74 mg/kg pc/d	Final use: Consumers Route of exposure: Oral Potential effects on health: Long term - systemic effects.
PNEC = 7.5 mg/L	Fresh water
PNEC = 1 mg/L	Marine water
PNEC = 7.5 mg/L	Intermittent release.
PNEC = 1000 mg/L	Sewage treatment plant.

8.2 - Exposure controls

Technical measures:

Provide water supplies, eyewash stations and safety showers in the vicinity.
Ensure proper ventilation, especially in confined areas.
Maintain the buildings and the working stations in a perfect state of cleanliness.

Avoid formation or diffusion of vapours, fumes or of aerosols in the atmosphere (particularly, when the product is loading or unloading).

Personal protective equipment: Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):

Use personal protective equipment that is clean and has been properly maintained
Store personal protective equipment in a clean place, away from the work area.
Never eat, drink or smoke during use.
Remove and wash contaminated clothing before re-using.

Eye protection: Wear safety glasses with side shields according to Standard EN166.

Hand protection: Chemical protective gloves according to Standard EN 374.
Type: Nitrile rubber (Thickness: 0.7 mm).

Skin protection: Wear protective clothing.
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 465).
Wash contaminated clothes before reuse.

Respiratory protection: Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2).

Environmental exposure controls: Avoid environmental contamination.

9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 - Information on basic physical and chemical properties

General indications:

Physical state:	At 20°C.
Appearance:	Liquid.
Colour:	Yellow.
Odour:	Characteristic.
Odour threshold:	Not determined.

Important health, safety and environmental information

pH at 20°C:	12.97 ± 0.02.
Melting point (°C):	No data available.
Freezing point (°C):	No data available.
Initial boiling point (°C):	No data available.
Flash point (°C):	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	Not concerned.
Flammability (Explosive) limits:	upper flammability (explosive) limit (% vol.): No data available. lower flammability (explosive) limit (% vol.): No data available.
Vapour pressure (hPa) at 20°C:	No data available.
Vapour density (air=1):	No data available.
Relative density (g/cm^3 at 20°C):	1.04 ± 0.05.
Solubility in water:	Soluble.
Partition coefficient: n-octanol/water:	No data available.
Auto-ignition temperature (°C):	No data available.
Decomposition temperature (°C):	No data available.
Viscosity (mPa.s) at 20°C:	No data available.

Explosive properties:	Product is not explosive. However, formation of explosive air/gas mixtures is possible.
Oxidizing properties:	No data available.

9.2 - Other information
No other data available.

10 - STABILITY AND REACTIVITY
10.1 - Reactivity
Exothermic reaction with water and strong acids.
Gives off hydrogen by reaction with base metals (zinc, aluminium) – Risk of explosion.

10.2 - Chemical stability
Stable under handling and the storage conditions recommended (see section 7).
Product sensitive to the carbon dioxide in the air (carbonation).

10.3 - Possibility of hazardous reactions
Corrosive to many metals. Contact with light metals causes a release of hydrogen gas which can form explosive mixtures with air.

10.4 - Conditions to avoid
Can decompose at high temperatures.
Protect from frost, heat and sunlight.
Avoid contact with amphoteric metals and light metals.

10.5 - Incompatible materials
Powerful oxidants, strong acids, amines, ammonia, light metals, ammonium compounds, halogenated compounds, organic materials.
Reacts with the majority of usual metals with hydrogen release (ferrous metals, zinc, and aluminium are vulnerable). Avoid contact with amphoteric metals and light metals.
Reacts with copper, aluminium, zinc, tin and their alloys.

10.6 - Hazardous decomposition products
Reacts with most metals to release hydrogen gas which can form explosive mixtures with air.
Thermal decomposition produces fumes and hazardous compounds such as: Carbon oxides, phosphorus oxides, potassium oxides and ammonia. May release formaldehyde when heated to high temperatures (> 150 °C).
In case of fire refer to section 5.

11 - TOXICOLOGICAL INFORMATION
11.1 - Information on toxicological effects
Toxicological information concerning the product:

Acute toxicity:	No data on the formulation, assessment by the conventional method. Corrosive for the eyes and the skin.

Local effects / Health effects:

Cutaneous:	Corrosive. Causes burns. Projections cause severe burns whose severity depends on the time of contact with the preparation.
Eye:	Corrosive. Risk of serious damage to eyes. Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
Inhalation:	Inhalation of aerosols may cause burns to mucous membranes.
Ingestion:	Causes burns. Danger of serious damage to health if swallowed. Risk of burns in the mouth, the throat and the gastro-intestinal tract.

Mucous membranes:	Corrosive. May cause burns to mucous membranes in the throat, esophagus and stomach. Danger of perforation of the oesophagus and the stomach.

Chronic toxicity:

Sensitization:	To our knowledge, no evidence of sensitization.
Carcinogenicity:	To our knowledge, no carcinogenic effect.
Mutagenicity:	To our knowledge, not mutagen.
Teratogenesis:	To our knowledge, no teratogenic.
Development/reproduction:	To our knowledge, no risk of lesion of the capacity of reproduction.
STOT:	STOT-RE/SE: No data available.

Other data:	Toxic effect linked with corrosive properties. Other dangerous properties for health cannot be excluded.

Toxicological information relating to the principal substances present in the product:

Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride (CAS 863679-20-3): SDS Supplier.

Acute toxicity:	LD_{50}po. (Rat): 300 – 2000 mg/kg.
Local effects:	Cutaneous: Rabbit: Irritant. May cause skin irritation and/or dermatitis. Eye: Rabbit: Corrosive. May cause irreversible damage. Inhalation: Inhalation of aerosols may cause irritation to mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours. Ingestion: Harmful if swallowed. May cause irritation to mucous membranes.
Chronic toxicity:	Sensitization: Skin: Not sensitizing. Mutagenicity: Not mutagen in the Ames's test.

Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy- (CAS 160875-66-1): SDS Supplier.

Acute toxicity:	LD50po. (Rat): > 2 000 mg/kg. LD50pc.: > 2 000 mg/kg.
Local effects/ Health effects:	Skin: No skin irritation. Eyes: Risk of serious damage to eyes.
Chronic toxicity:	Sensitization: No skin sensitization effects. Mutagenicity: Genotoxicity in vitro: negative. Genotoxicity in vivo: negative. Teratogenesis: > 250 mg/kg. STOT-RE: NOEL: 250 mg/kg.

Tetrasodium ethylene diamine tetraacetate (CAS 64-02-8): SDS Supplier.

Acute toxicity:	LD_{50}po. (Rat): 1 780 – 2 000 mg/kg. LC_{50}inh. (Rat, 6h): 1 000 – 5 000 mg/m^3. (by analogy, OECD 403).
Local effects:	Cutaneous: Rabbit: Not Irritant. Eye: Rabbit: Irritant. Risk of serious damage to eyes and permanent injuries. Inhalation: Difficulties to breath. Ingestion: Gastrointestinal disorders, mucous membrane irritation.
Chronic toxicity:	Sensitization: Skin: No skin sensitization effects were observed in a Guinea Pig Maximisation Test (GPMT) (by analogy, OECD 406). Mutagenicity: Not mutagen: In the majority of tests performed (bacteria/microorganisms/cell cultures) a mutagenic effect was not found. A mutagenic effect was also not observed in in-vivo assays. Carcinogenicity: Not carcinogen: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. Reproductive toxicity: Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental

animals. The results of animal studies gave no indication of a fertility impairing effect.
STOT-SE: Based on the available information there is no specific target organ toxicity to be expected after a single exposure.
STOT-RE: No adverse effects were observed after repeated exposure in animal studies.

Tetrapotassium pyrophosphate (CAS 7320-34-5): SDS Supplier.

Acute toxicity: LD_{50}po. (Rat): > 2 000 mg/kg (Weight of evidence).
LD_{50}pc. (Rabbit): > 4 640 mg/kg (equivalent to OECD 402).
LC_{50}inh. (Rat, 6h): > 1.1 mg/L. (OECD 403, EU method B.2.).

Local effects: Cutaneous: Rabbit: Prolonged skin contact may cause skin irritation and/or dermatitis.
Eye: Rabbit: Irritant category II (equivalent to OECD 405)
Inhalation: May cause an irritation of the respiratory tract with cough.

Chronic toxicity: Sensitization: No sensitization.
Carcinogenicity: Not investigated (no data to suggest likelihood of carcinogenicity).
Mutagenicity: Not investigated (tetrapotassium pyrophosphate is not expected to produce germ cell genotoxic damage).
Development/reproduction: Not applicable (no evidence of reproductive toxicity based on expert assessment of all available relevant data).
STOT-SE: May cause respiratory irritation.
STOT-RE: No data available.

Sodium hydroxide (CAS 1310-73-2): SDS Supplier.

Acute toxicity: LD_{50}po. (Rat): 150 – 340 mg/kg.
LD_{50}pc. (Rabbit): 1 350 mg/kg.

Local effects: Inhalation: Corrosive for the respiratory tract. Intense irritation of the nose and the throat, cough, and difficult breathing. To high concentrations, risks of chemical broncho-pneumonia and of pulmonary oedema. In case of repeated or prolonged exposure: risk of sore throat, nose bleeds, chronic bronchitis.
Cutaneous: Serious major and extensive caustic lesions if a washing is not quickly carried out.
Eye: Serious major and extensive caustic lesions if a washing is not quickly carried out. The after-effects are frequent (glaucoma, corneal opacities, cataract…). Risk of blindness.
Ingestion: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of oesophagus and the stomach.
Inhalation: Burns of mucous membranes, Cough, Shortness of breath, damages of respiratory tract.

Chronic toxicity: Genotoxicity in vitro: Mutagenicity (mammal cell test): micronucleus. Result: negative (Lit.) – Ames test: Result: negative (IUCLID)
Teratogenicity: Did not show teratogenic effects in animal experiments. (Lit.)
STOT-SE: Not classified as specific target organ toxicant, single exposure.
STOT-RE: Not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity: Based on available data the classification criteria are not met.

Potassium hydroxide (CAS 1310-58-3): SDS Supplier.

Acute toxicity: LD_{50}po. (Rat): 275 mg/kg.
LD_{50}pc. (Rabbit): 1 350 mg/kg.

Local effects:	Inhalation: Intense irritation and caustic lesions of mucus membranes of eyes and respiratory tract. Ingestion: Harmful if swallowing. Oral, retro-sternal and epigastric pains. The vomiting is frequent and sometimes bloody. Examinations of the oral cavity reveal almost always severe burns. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Cutaneous (Rabbit): Very corrosive. Cause burns. Caustic lesions, light burns, slow cure and sometimes retractile scars. The gravity of the lesions depends on the quantity applied, the concentration and the time of contact. Eye (Rabbit): Very corrosive. Serious damage to eyes. Severe burns of different tissues of the eye with a risk of after-effects (corneal opacities, glaucoma, cataract).
Chronic toxicity:	Sensitization (Guinea pig): No skin sensitization effects. Mutagenicity: Not mutagenic. Carcinogenicity: Estimated not carcinogenic. Development/reproduction: Animals studies show that this substance has no adverse reproductive effect. STOT-SE: Not classified as specific target organ toxicant, single exposure. STOT-RE: Not classified as specific target organ toxicant, repeated exposure.

Disodium metasilicate (CAS 6834-92-0): SDS Supplier.

Acute toxicity:	LD_{50}p.o. (Rat): 1 152 – 1 350 mg/kg. LD_{50}pc. (Rabbit): >5 000 mg/kg. LC_{50}inh. (Rat, 6h): 2.06 mg/m^3.
Local effects:	Skin (Rabbit): Corrosive. (OECD 404) Eye (Rabbit): Corrosive. Risk of serious damage to eyes. Inhalation: Irritation of the respiratory system. Ingestion: Burns of the mouth, the throat and the stomach, due to the corrosive alkalinity of the product. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.
Chronic toxicity:	Sensitization: No skin sensitization (Solution at 30% weight). Carcinogenicity: Does not contain any compound listed as a carcinogen or potential carcinogen. Mutagenicity: Not mutagenic (*in vitro*). Does not contain any ingredient listed as a mutagen. Teratogenicity: Not considered to be teratogenic. Reproductive toxicity: Contains no ingredient listed as toxic to reproduction. STOT-SE: May cause respiratory irritation. STOT-RE: Not classified as specific target organ toxicant, repeated exposure. NOAELoral (Rat): 227 mg/kg bw /day NOAELoral (Mousse): 260 mg/kg bw /day

12 - ECOLOGICAL INFORMATION

12.1 - Toxicity

Information concerning the mixture:

No data on specific toxicity to soil organisms, plants and terrestrial and aquatic animals are available.

Acute ecotoxicity:	No data on the formulation. The product does not contain any substance classified dangerous for the environment however, the product is alkali and could increase the pH of the aquatic systems.
Chronic ecotoxicity:	No data on the formulation.

Impact on sewage treatment plants: The product is alkaline and does not have to arrive at the sewage treatment plant without preliminary neutralization.
Small quantities can be neutralized in adapted biological sewage treatment plant.

Information relating to the principal substances present in the mixture:

Substance	CAS N°	Data	References
Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride	863679-20-3	LC_{50} (96h/ Fish): 10 – 100 mg/L.	SDS supplier
		EC_{50} (48h/ Daphnia):1 – 10 mg/L.	
		EC_{50} (72h/ Algae): 1 – 10 mg/L.	
Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy-	160875-66-1	LC_{50} (96h/*Oncorhynchus mykiss*): > 10 – 100 mg/L	SDS supplier
		EC_{50} (48h/ *Daphnia magna*): > 10 – 100 mg/L	
		IC_{50} (72h/ Algae): > 10 – 100 mg/L	
Tetrasodium ethylene diamine tetraacetate	64-02-8	LC_{50} (96h/ *Lepomis macrochirus*) :> 100 mg/L(1).	OPP 72-1 (EPA, static) SDS supplier
		EC_{50} (48h/ *Daphnia magna*): > 100 mg/L(1).	DIN 38412 SDS supplier
		EC_{50} (72h/ *Scenedesmus obliquus*): > 100 mg/L.	Dir. 88/302/CEE, static SDS supplier
		EC_{20} (30 min./ *Activated sludge*): > 500 mg/L.	OECD 209, aquatic SDS supplier
		NOEC (35d/ *Brachydanio rerio*): ≥ 36.9 mg/L(1)	OCDE 210 SDS supplier
		NOEC (21d/ *Daphnia magna*): 25 mg/L(1)	OCDE 211 SDS supplier
Tetrapotassium pyrophosphate	7320-34-5	LC_{50} (96h/ *rainbow trout*): > 100 mg/L(1).	OECD 203 SDS supplier
		EC_{50} (48h/ *Daphnia magna*): > 100 mg/L.	EPA OTS 797.1300 SDS supplier
		EC_{50} (72h/ Algae): > 100 mg/L.	SDS supplier
		EC_{50} (3h/ Activated sludge):> 1 000 mg/L(1).	OECD 209 SDS supplier
Sodium hydroxide	1310-73-2	LC_{50} (96h/ *Oncorhynchus mykiss*): 45.4 mg/L	SDS supplier
		LC_{50} (96h/ *Gambusia affinis*): 125 mg/L	SDS supplier
		EC_{50} (24h/ *Daphnia magna*): 76 mg/L	SDS supplier
		EC_{50} (48h/ *Ceriodaphnia*): 40.4 mg/L	SDS supplier
		IC_{50} (15 min/ *Photobacterium phosphoreum*): 22 mg/L	SDS supplier
Potassium hydroxide	1310-58-3	LC_{50} (96h/ *Fathead Minnow*): 179 mg/L	SDS supplier
		LC_{50} (96h/ *Gambusia affinis*): 80 mg/L	SDS supplier
		EC_{50} (24h/ *Daphnia magna*): 270 mg/L	SDS supplier
		IC_{50} (15 min./ *Photobacterium phosphoreum*): > 22 mg/L.	SDS supplier
Disodium metasilicate (Na_2O_3Si)	6834-92-0	LC_{50} (96h/ *Brachydanio rerio*): 210 mg/L	SDS supplier
		EC_{50} (48h/ *Daphnia magna*): 1 700 mg/L	SDS supplier
		EC_{50} (72h/ *Scenedesmus subspicatus*) : Biomass: 207 mg/L Growth rate: 345.4 mg/L	SDS supplier

(1) Values estimated from tests carried out on similar products.

12.2 - Persistence and degradability

Information concerning the mixture:

Biodegradation: Inherently biodegradable.

Information relating to the principal substances present in the mixture:

Substance	CAS N°	BOD –ThOD – COD	References
Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride	863679-20-3	Readily biodegradable, BOD >60 %, 28 d, *Closed Bottle Test*	OECD 301D SDS supplier
Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy-	160875-66-1	Readily Biodegradable > 60 % (28 d)	OECD 301B SDS supplier
Tetrasodium ethylene diamine tetraacetate	64-02-8	Inherently biodegradable. Not readily biodegradable according to OECD criteria. (DThO): 654 mg/g	SDS supplier
Tetrapotassium pyrophosphate	7320-34-5	The methods for determining biodegradability are not applicable to inorganic substances	SDS supplier
Sodium hydroxide	1310-73-2	The methods for determining biodegradability are not applicable to inorganic substances	SDS supplier
Potassium hydroxide	1310-58-3	The methods for determining biodegradability are not applicable to inorganic substances. Degradation by the atmospheric carbon dioxide.	SDS supplier
Disodium metasilicate	6834-92-0	The methods for determining biodegradability are not applicable to inorganic substances. In aqueous solution of pH < 9 the silicate is mineralized and precipitated. The maximal concentration of soluble silicate in this pH is 120 mg/L.	SDS supplier

12.3 - Bioaccumulative potential

Information concerning the mixture:

Bioaccumulation: Not anticipated to bio-accumulate according to SDS of the substances suppliers.

Information relating to the principal substances present in the mixture:

Substance	CAS N°	log Pow – BCF	References
Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride	863679-20-3	Not anticipated. Product biodegradable and soluble in water.	SDS supplier
Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy-	160875-66-1	Bioaccumulation in the organisms is not anticipated.	SDS supplier
Tetrasodium ethylene diamine tetraacetate	64-02-8	Bioaccumulation in the organisms is not anticipated. BCF: approx. 1.8 (28 d), *Lepomis macrochirus.*	SDS supplier
Tetrapotassium pyrophosphate	7320-34-5	Minimal	SDS supplier
Sodium hydroxide	1310-73-2	Not bioaccumulable	SDS supplier
Potassium hydroxide	1310-58-3	Not bioaccumulable.	SDS supplier
Disodium metasilicate	6834-92-0	Not bioaccumulable.	SDS supplier

12.4 - Mobility in soil

Information concerning the mixture:

Ultimate target destination of the product: water and ground.

Information relating to the principal substances present in the mixture:

Substance	CAS N°	Data	References
Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride	863679-20-3	No data available.	SDS supplier
Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy-	160875-66-1	Soluble in water. The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is possible	SDS supplier
Tetrasodium ethylene diamine tetraacetate	64-02-8	The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is possible.	SDS supplier
Tetrapotassium pyrophosphate	7320-34-5	No data available.	SDS supplier
Sodium hydroxide	1310-73-2	Product infiltrating easily in the soil.	SDS supplier
Potassium hydroxide	1310-58-3	Potential for mobility in soil very high.	SDS supplier
Disodium metasilicate	6834-92-0	Aqueous solution: Potential for mobility in soil very high	SDS supplier

12.5 - Results of PBT and vPvB assessment

Information concerning the mixture:

This mixture does not contain substances that meet the PBT or vPvB criteria of REACH, annex XIII.

Information relating to the principal substances present in the mixture:

Substance	CAS N°	Statut	References
Quaternary C12-14 alkyl methyl amine ethoxylate methyl chloride	863679-20-3	Not classified as PBT or vPvB.	SDS supplier
Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy-	160875-66-1	Not classified as PBT or vPvB.	SDS supplier
Tetrasodium ethylene diamine tetraacetate	64-02-8	Not classified as PBT or vPvB.	SDS supplier
Tetrapotassium pyrophosphate	7320-34-5	Not classified as PBT or vPvB. The criteria for the identification of PBT/vPvB properties do not apply to inorganic substances.	SDS supplier
Sodium hydroxide	1310-73-2	Not classified as PBT or vPvB. The criteria for the identification of PBT/vPvB properties do not apply to inorganic substances.	SDS supplier
Potassium hydroxide	1310-58-3	Not classified as PBT or vPvB. The criteria for the identification of PBT/vPvB properties do not apply to inorganic substances.	SDS supplier
Disodium metasilicate	6834-92-0	Not classified as PBT or vPvB. The criteria for the identification of PBT/vPvB properties do not apply to inorganic substances.	SDS supplier

12.6 - Other adverse effects

Other effects:

Toxic effect due to the modification of the water pH.
The substance cannot be discharged in a not controlled way: it could be harmful to the aquatic organisms.
Depending on concentration, toxic effects on activated sludge organisms are possible.

13 - DISPOSAL CONSIDERATIONS

13.1 - Waste treatment methods

Waste disposal:

Prohibitions: Do not discharge in the environment.
Do not evacuate with the household waste.

Destruction/Elimination: The chemical residues are generally classified like special waste and are regulated according to their use. Recycle or dispose of according to local/national regulations, preferably by an approved collecting and treating centre of chemical waste.

Soiled packing:

Disposal: Contaminated packing must be treated in the same way that the respective chemical.

National regulations (France):

Waste: The regulation relating to waste is codified in the "CODE DE L'ENVIRONNEMENT", according to the Ordinance 2010-1579 of December 17, 2010.
Code de l'Environnement – Part I – Book V (Prevention of pollution, the risks and the harmful effects) – Title IV (Waste) – Chapter I (Waste disposal and recovery of materials) – Art. L. 541-1 à L. 541-50.

Waste category: The waste classification is given in the "CODE DE L'ENVIRONNEMENT", according to the Decree 2007-1467 of October 12, 2007.
Code de l'Environnement – Part II – Book V (Prevention of pollution, the risks and the harmful effects) – Title IV (Waste) – Chapter I (Waste disposal and recovery of materials) – Section I – Sous-Section II – Art. R. 541-7 à R. 541-11 and their annexes.

Waste code: Waste codes should be assigned by the user according to their use. The waste producer is responsible for the correct specification of the waste. The specification of the waste classification should be in arrangement with the authorised waste disposal company.
The waste code(s) given below is/are indicated as a suggestion:
20 01 29*: Detergents containing dangerous substances.

International regulations (EC):

Waste: Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

Waste shipments: Regulation (EC) N° 1013/2006 of the European Parliament and of the Council of 14th June 2006 on shipments of waste.

Waste code: Commission Decision 2014/955/EU amending decision 2000/532/EC of 3 May 2000 establishing a list of hazardous waste.
Waste codes should be assigned by the user according to their use. The waste producer is responsible for the correct specification of the waste. The specification of the waste classification should be in arrangement with the authorised waste disposal company.

Waste code: European Waste Classification (Eural Code):
The waste code(s) given below is/are indicated as a suggestion:
20 01 29*: Detergents containing dangerous substances.

Notice
The user should be aware of the possible existence of national, provincial, municipal or local regulations that may affect waste disposal procedures.

14 - TRANSPORT INFORMATION

ADR	IMDG	IATA

14.1 - UN number

UN number:		
3267	3267	3267

14.2 - UN proper shipping name

UN proper shipping name:		
Corrosive liquid, basic, organic, NOS. (Contains: quaternary alkyl amine, ethoxylated alcohol, EDTA, sodium hydroxide and potassium hydroxide in solution)	Corrosive liquid, basic, organic, NOS. (Contains: quaternary alkyl amine, ethoxylated alcohol, EDTA, sodium hydroxide and potassium hydroxide in solution)	Corrosive liquid, basic, organic, NOS. (Contains: quaternary alkyl amine, ethoxylated alcohol, EDTA, sodium hydroxide and potassium hydroxide in solution)

14.3 - Transport hazard class(es)

Classe(s) :		
8	8	8
		
CC:		
C7		
Hazard:		
80		
Quantity limited:		
1L	1L	
Quantity excepted:		
E2	E2	
N° EMS:		
	F-A ; S-B	

14.4 - Packing group

Packing group:		
II	II	II
Label:		
8	8	8

14.5 - Environmental hazards

Marine pollutants:		
No	No	No

14.6 - Special precautions for user

Warning: Corrosive substances
Complementary data: In case of accident, refer to special instructions of Chapters 5, 6 and 7 of this Safety Data Sheets.

14.7 - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

The mixture is not concerned.

Note
The regulations cited above are those in force as of the date of this writing. Due to the continuous evolution of regulations governing transport of hazardous materials, users are advised to obtain updated information from their supplier if the SDS in their possession is more than 12 months old.

15 - REGULATORY INFORMATION

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

International regulations (EC):

Regulation (EC) No. 1907/2006 (REACH):

- Annex XIV (authorization: SVHCA): The mixture does not contain any listed substance.
- Annex XVII (restriction): The mixture does not contain any listed substance.

The mixture is not subjected to authorization of marketing or to use restriction.

Regulation 648/2004/EC: The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents.

Labelling according to Regulation (EC) No. 648/2004 and 907/2006:

< 5 % - Non-ionic surfactants.
< 5 % - Anionic surfactants.
< 5 % - Phosphates.
< 5 % - EDTA.

Directive 2012/18/EU (96/82/EC): On the control of major-accident hazards involving dangerous substance.
Annex I, Part 1, substances covered:
Not concerned.

People protection:

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work.
Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
Council Directive 92/85/EC of 19 October 1992 on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

National Regulations (French):

Workers protection:

Labour Code: The regulation relating to workers protection is codified in the "CODE DU TRAVAIL", according to the Ordinance 2007-239 of March 12, 2007.
Labour code – Legislative Part – Part IV (Health and Safety at Work).
Special arrangements for certain categories of workers are planned Book I – Title V:
Chapter II, Art. L4152-1 and L4152-2: Pregnant and lactating women;
Chapter III, Art. L4153-1 to 9: Young people at work;
Chapter IV, Art. L4154-1 to 4: Part-time work.
The prevention of chemical risks is provided Book IV – Title VI – Art. L4411 and L4412.
Labour Code – Regulatory Part – Part IV (Health and Safety at Work).
Special arrangements for certain categories of workers are planned Book I – Title V:
Chapter II, Art. D4152-9 to 11: Pregnant and lactating women;
Chapter III, Art. D4153-17 to 18: Young people;
Chapter IV, Art. D4154-1: Part-time work.
Special medical surveillance is provided Book VI – Title II – Chapter IV – Section 2 – Sous-section 3 – Art. R4624-18 and R4624-19.

Social Security Code: The regulation relating to professional diseases is codified in the "CODE DE LA SECURITE SOCIALE", according to the Ordinance 2005-804 of July 18, 2005.

Social Security Code – Legislative Part – Book IV – Title VI – Art. L 461-1 to 8.
Art. L.461-4: Declaration of employment to "Primary Health Insurance" and to the labor inspectorate.
Social Security Code – Regulatory Part – Book IV – Title VI – Art. R461-3 and D461-1 – Art. Annex II.
Table(s) of occupational illnesses and diseases No.: 84.

Others: Order of February, 7th 2007 defining classification criteria, packaging and labelling conditions of dangerous preparations.
Decree 2003-1254 of December, 23th 2003 (JORF of March, 2nd 2004).

Environmental Protection:

Classified installations: Classified Installations for the Protection of Environment (ICPE).
Not concerned.

Wastes: The regulation relating to waste is codified in the "CODE DE L'ENVIRONNEMENT": Ordinance 2010-1579 of December 17, 2010.

Waste category: The waste classification is given in the "CODE DE L'ENVIRONNEMENT": Decree 2007-1467 of October 12, 2007.
The waste code(s) given below is/are indicated as a suggestion:
20 01 29*: Detergents containing dangerous substances.

People protection:

Detergent: The regulation relating to detergent is codified notably in

- the "CODE DE L'ENVIRONNEMENT": Decree 2009-1083 of September 1st, 2009.
- the "CODE DE L'ENVIRONNEMENT": Art. R. 211-60 ; Art. R. 211-63 ; Art. R. 211-63.
- Notice regarding the implementation of Regulation (EC) n°648/2004 of March 31th, 2004 on detergents, JORF of May 31th, 2006.

Customs code: Combined Nomenclature (NC): 34.02.20.20.

National Regulations (Germany):

VwVwS: Water pollution class: WGK calculated: WGK1.

Substance	N° CAS	WGK
Quaternary coco alkyl methyl amine ethoxylate methyl chloride	863679-20-3	WGK2
Tetrasodium ethylene diamine tetraacetate	64-02-8	WGK2
Poly(oxy-1,2-ethanediyl), .alpha.-(2-propylheptyl)-.omega.-hydroxy-	160875-66-1	WGK1
Sodium hydroxide	1310-73-2	WGK1
Potassium hydroxide	1310-58-3	WGK1
Disodium metasilicate	6834-92-0	WGK1

International Regulations:
Recording numbers:

European Inventory: All the components of this preparation are registered in EINECS or in ELINCS inventories or in NLP list.
All components of this preparation are registered in REACH or are exempted from registration (polymers).
The polymer is in conformity with the definition of the 7th amendment of the 67/548/EEC Directive and with the definition of the Article 3(5) of Regulation 1907/2006/EC (REACH).

Others International Inventory: None of the components of this preparation are listed as carcinogen by IARC, NTPC or OSHA inventories.

15.2 - Chemical safety assessment

No assessment of the chemical safety was carried out by the supplier for this mixture.
A Chemical Safety Assessment of was made for:

Substance	CAS number
Potassium hydroxide	1310-58-3
Sodium hydroxide	1310-73-2
Tetrapotassium pyrophosphate	7320-34-5
Disodium metasilicate	6834-92-0
Quaternary coco alkyl methyl amine ethoxylate methyl chloride	863679-20-3
Tetrasodium ethylene diamine tetraacetate	64-02-8

Note
The legal information cited this section (heading) reflects only the principal regulations specifically applicable to the subject of these SDS. The basic Community texts citied are the subjects of updates and are transcribed in national law. Users are encouraged to refer to all applicable measures or provisions, international, national and local. Users should be aware of the possible existence of other provisions supplementing these regulations.

16 - OTHER INFORMATION

Update: This SDS was updated (see date in top of page).
Modifications since the last version are indicated with (*).

Reason of update: Update of information concerning the labelling.

Abbreviations and acronyms: Abbreviations and acronyms list usually used in our SDS:

ATE: Acute Toxicity Estimate.
BCF: BioConcentration Factor.
BOD: Biological Oxygen Demand**.**
CAS No.: Chemical Abstract Service Registry Number
COD: Chemical oxygen demand.
DMEL: Derived Minimal Effect Level.
DNEL: Derived No-Effect Level.
EC_{50}: Effective Concentration for 50% of the test population.
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
EL_{50}: Effective Level or Effective Loading rate lethal to 50% of the test population. (EL_{50} is similar to EC_{50}, but tests the water phase from incompletely miscible mixtures).
IARC: International Agency for Research on Cancer – CIRC : Centre international de recherche sur le cancer.
INERIS: Institut National de l'Environnement industriel et des RISques.
INRS: Institut National de Recherche et de Sécurité.
IUCLID: International Uniform ChemicaL Information Database.
LC_{50}: Lethal Concentration for 50% of the test population.
LD_{50}: Lethal Dose level for 50% of the test population.
LL_{50}: Lethal Level or Lethal Loading rate for 50% of the test population (LL_{50} is similar to LC_{50}, but tests the water phase from incompletely miscible mixtures).

Loading Rate:	total amount of test substance added to dilution water to prepare WAFs for ecotoxicity testing.
LOAEL:	Lowest Observable Adverse Effect Level.
Log Kow:	octanol-water partition coefficient.
NLP:	No-Longer Polymers list.
NOAEL:	No Observable Adverse Effect Level.
NOEC:	No Observable Effect Concentration.
NOELR:	No Observable Effect Loading Rate.
OECD:	Organisation for Economic Co-operation and Development.
OEL:	Occupational Exposure Limit.
PBT:	Persistent, Bioaccumulative and Toxic.
vPvB:	very Persistent very Bioaccumulative.
PNEC:	Predicted No-Effect Concentration.
REACH:	Registration, Evaluation, Authorization and restriction of CHemicals.
STEL:	Short Term Exposure Limit.
ThOD:	Theoretical Oxygen Demand.
TIC:	Tremcard international Code.
TWA:	Time Weighted Average.
UVCB:	Unknown or Variable Composition or Complex Biological Origin.
VLE:	Valeurs Limites d'Expositions professionnelles courts termes sur 15 minutes (VLCT). (VLE or VLTC are similar to STEL). VME: Valeurs limites d'expositions professionnelles sur 8 heures (VLEP). (VME or VLEP are similar to TWA).
WAFs:	Water Accommodated Fractions: An aqueous fraction containing the dissolved and/or suspended and/or emulsified fraction of a multi-component substances or a mixture.
WGK:	WasserGefahrdungsKlasse (water pollution class, Germany).

References and sources for data: SDS suppliers.
Regulation (EC) no 1907/2006 of the European Parliament and of the Council of 18th December 2006, REACH.
Regulation (EC) no 1272/2008 of the European Parliament and of the Council of 16th December 2008, CLP.
ECHA – http://echa.europa.eu.
Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA) – http://www.dguv.de.
International Chemical Safety Cards (ICSCs) – http://www.inchem.org.
INRS – http://www.inrs.fr.

List of R and H phrases of the substances indicated in sections 2 and 3:

Met. Corr.:	Corrosive to metals.
Acute Tox.:	Acute toxicity.
Skin Cor.:	Skin corrosion.
Skin Irrit.:	Skin irritation.
Eye Dam.:	Eye damage.
Eye Irrit.:	Eye irritation.
STOT-SE:	Specific target organ toxicity - single exposure.
STOT-RE:	Specific target organ toxicity - repeated exposure.
H290:	May be corrosive to metals.
H302:	Harmful if swallowed.
H314:	Causes severe skin burns and eye damage.
H315 :	Provoque une irritation cutanée.
H318 :	Provoque des lésions oculaires graves.
H319:	Causes serious eye irritation.
H332:	Harmful if inhaled.
H335:	May cause respiratory irritation.

H373:	May cause damage to organs through prolonged or repeated exposure.
C:	Corrosive.
Xn:	Harmful.
Xi:	Irritant / Sensitizing.
R 22:	Harmful if swallowed.
R 34:	Causes burns.
R 35:	Causes severe burns.
R 37:	Irritating to respiratory system.
R 38 :	Irritant pour la peau.
R 41:	Risk of serious damage to eyes.
R 36/37/38:	Irritating to eyes, respiratory system and skin
R 48/20/22:	Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

List of P phrases indicated in sections 2:

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 container.
P260:	Do not breathe dust/fume/gas/mist/vapours/spray.
P264:	Wash hands thoroughly after handling.
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): Remove/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.
P304 + P340:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310:	Immediately call a POISON CENTER or doctor/physician.
P363:	Wash contaminated clothing before reuse.
P390:	Absorb spillage to prevent material damage.
P405:	Store locked up.
P501:	Dispose of contents/container to an approved waste disposal plant in accordance with local/regional/national/international regulation.

Author: SDS worked out by CB Distribution, according to the commission regulation (EU) N° 2015/830 of 28 May 2015 amending the guideline of the FDS given in annex II of European Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Advice to users
This SDS supplements the technical notice but does not replace it. The information which it contains is based on the best data available as of the date of issuance, as are references to regulations and laws. It is given in good faith.
Users should be aware of potential risks if the product is used for purpose other than those for which it is intended.
The user is responsible for observing the regulations governing the usage of such products, and for observing appropriate precautions in usage, handling, and storage.
The laws and regulations cited in this document should not be considered an exhaustive listing; they are mentioned to assist users in the proper usage of this product, but it remains the responsibility of users to observe all laws and regulations governing its usage.

End of the document: contains 24 pages.