SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : CYCLONE BIOTECH AD

Product code : 20500

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

Degreaser, disinfectant.

Professional use.

1.3. Details of the supplier of the safety data sheet

IPC - 10 Quai Malbert

29200 BREST France

Tél : +33(0)2.98.43.45.44 - Fax : +33 (0)2.98.44.22.53

ipc@groupe-ipc.com

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : ORFILA http://www.centres-antipoison.net.

Other emergency numbers

United Kingdom : Guy's & St Thomas' Poisons Unit, London: +44 870 243 2241

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

Biocidal detergent mixture (see section 15).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :

GHS05

Signal Word :

DANGER

Product identifiers :

EC 932-106-6	ALCOHOLS C12-14, ETHOXYLATED
EC 230-525-2	DIDECYLDIMETHYLAMMONIUM CHLORIDE
CAS 160875-66-1	2-PROPYLHEPTANOLETHOXILATE
CAS 1591782-62-5	D-GLUCITOL, 1-DEOXY-1-(METHYLAMINO)-, N-C8-10 ACYL DERIVS.

Hazard statements :

H315	Causes skin irritation.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.

Precautionary statements - Response :

P302 + P352	IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER, a doctor.
P332 + P313	If skin irritation occurs: Get medical advice/attention.

Precautionary statements - Disposal :

P501	Dispose of contents/container in accordance with local / regional / national / international regulations.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 59 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	Classification (EC) 1272/2008	Note	%
INDEX: 603-096-00-8 CAS: 112-34-5 EC: 203-961-6 REACH: 01-2119475104-44 2-(2-BUTOXYETHOXY)ETHANOL	GHS07 Wng Eye Irrit. 2, H319	[i] [xvii]	2.5 <= x % < 10
INDEX: 68439_50_9 CAS: 68439-50-9 EC: 932-106-6 ALCOHOLS C12-14, ETHOXYLATED	GHS07, GHS05 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Chronic 3, H412		2.5 <= x % < 10
INDEX: 603_002_00_5 CAS: 64-17-5 EC: 200-578-6 REACH: 01-2119457610-43 ETHANOL	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319	[i]	2.5 <= x % < 10
INDEX: 612_131_00_6 CAS: 7173-51-5 EC: 230-525-2 DIDECYLDIMETHYLAMMONIUM CHLORIDE	GHS07, GHS05, GHS09 Dgr Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 2, H411 Aquatic Acute 1, H400 M Acute = 10		1 <= x % < 2.5
INDEX: 160875_66_1 CAS: 160875-66-1 2-PROPYLHEPTANOLETHOXILATE	GHS07, GHS05 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318		1 <= x % < 2.5
INDEX: 1591782_62_5 CAS: 1591782-62-5 REACH: 01-2120028964-50 D-GLUCITOL, 1-DEOXY-1-(METHYLAMINO)-, N-C8-10 ACYL DERIVS.	GHS07, GHS05 Dgr Eye Dam. 1, H318 Acute Tox. 4, H332		1 <= x % < 2.5
INDEX: 603_030_00_8 CAS: 141-43-5 EC: 205-483-3 REACH: 01-2119486455-28 2-AMINOETHANOL	GHS07, GHS05 Dgr Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Chronic 3, H412	[i]	0.1 <= x % < 1

INDEX: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25 PROPAN-2-OL	GHS02, GHS07 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[i]	0.1 <= x % < 1
INDEX: 68424_85_1A CAS: 68424-85-1 EC: 270-325-2 QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES	GHS07, GHS05, GHS09 Dgr Acute Tox. 4, H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 M Acute = 10 Aquatic Chronic 1, H410 M Chronic = 1		0.1 <= x % < 1
INDEX: 57_55_6 CAS: 57-55-6 EC: 200-338-0 REACH: 01-2119456809-23 PROPYLENE GLYCOL		[i]	0.1 <= x % < 1
INDEX: 2821849_04_9 CAS: 2821849-04-9 EC: 889-060-4 REACH: 01-2120934640-59 GLYCOLIPIDS, SOPHOROSE-CONT., STARMERELLA BOMBICOLA-FERMENTED, FROM C16-18 AND C18-UNSATD. GLYCERIDES AND D-GLUCOSE	GHS07 Wng Eye Irrit. 2, H319		0.1 <= x % < 1
INDEX: 606-002-00-3 CAS: 78-93-3 EC: 201-159-0 BUTANONE	GHS02, GHS07 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[i]	0 <= x % < 0.1
INDEX: 3734_33_6 CAS: 3734-33-6 EC: 223-095-2 BENZOATE DE DENATONIUM	GHS07, GHS05 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318 Acute Tox. 4, H332 Aquatic Chronic 3, H412		0 <= x % < 0.1
INDEX: 011_002_00_6 CAS: 1310-73-2 EC: 215-185-5 REACH: 01-2119457892-27 SODIUM HYDROXIDE	GHS05 Dgr Met. Corr. 1, H290 Skin Corr. 1A, H314	[i]	0 <= x % < 0.1
INDEX: 2102535_74_8 CAS: 2102535-74-8 EC: 955-862-9 GLYCOLIPIDS, SOPHOROSE CONT.,STARMERELLA BOMBICOLA FERMENTED. FROM C16 18 AND C18 UNSATD. GLYCERIDES AND D GLUCOSE	GHS07 Wng Eye Irrit. 2, H319		0 <= x % < 0.1

Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: 603_002_00_5 CAS: 64-17-5 EC: 200-578-6 REACH: 01-2119457610-43 ETHANOL	Eye Irrit. 2A: H319 C>= 50%	inhalation: ATE = 51 mg/l 4h oral: ATE = 10470 mg/kg BW

INDEX: 612_131_00_6 CAS: 7173-51-5 EC: 230-525-2 DIDECYLDIMETHYLAMMONIUM CHLORIDE		oral: ATE = 658 mg/kg BW
INDEX: 1591782_62_5 CAS: 1591782-62-5 REACH: 01-2120028964-50 D-GLUCITOL, 1-DEOXY-1-(METHYLAMINO)-, N-C8-10 ACYL DERIVS.		oral: ATE = 500 mg/kg BW
INDEX: 603_030_00_8 CAS: 141-43-5 EC: 205-483-3 REACH: 01-2119486455-28 2-AMINOETHANOL	STOT SE 3: H335 C>= 5%	oral: ATE = 1089 mg/kg BW
INDEX: 68424_85_1A CAS: 68424-85-1 EC: 270-325-2 QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES		oral: ATE = 795 mg/kg BW
INDEX: 3734_33_6 CAS: 3734-33-6 EC: 223-095-2 BENZOATE DE DENATONIUM		inhalation: ATE = 200 mg/l (dust/mist) oral: ATE = 584 mg/kg BW
INDEX: 011_002_00_6 CAS: 1310-73-2 EC: 215-185-5 REACH: 01-2119457892-27 SODIUM HYDROXIDE	Skin Corr. 1A: H314 C>= 5% Skin Corr. 1B: H314 2% <= C < 5% Skin Irrit. 2: H315 0.5% <= C < 2% Eye Dam. 1: H318 C>= 2% Eye Irrit. 2: H319 0.5% <= C < 2%	dermal: ATE = 1350 mg/kg BW

Information on ingredients :

(Full text of H-phrases: see section 16)

[i] Substance for which maximum workplace exposure limits are available.

[xvii] Restricted substance under Regulation (EC) No. 1907/2006 (REACH), Annex XVII.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of exposure by inhalation :

In the event of massive inhalation, remove the person to fresh air and keep warm and at rest.

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated aera is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Neutralise with an acidic decontaminant.

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid eye contact with this mixture at all times.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Keep out of reach of children.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
112-34-5	67.5	10	101.2	15	-
141-43-5	2.5	1	7.6	3	Peau
78-93-3	600	200	900	300	-

- UK :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
112-34-5	10 ppm 67.5 mg/m3	15 ppm 101.2 mg/m3			
64-17-5	1000 ppm 1920 mg/m3				
141-43-5	1 ppm 2.5 mg/m3	3 ppm 7.6 mg/m3		Sk	
67-63-0	400 ppm 999 mg/m3	500 ppm 1250 mg/m3			
57-55-6	10 mg/m3				
78-93-3	200 ppm 600 mg/m3	300 ppm 899 mg/m3		Sk. BMGV	
1310-73-2		2 mg/m3			

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

PROPAN-2-OL (CAS: 67-63-0)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	888 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	500 mg of substance/m3

Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	26 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	319 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	89 mg of substance/m3

2-AMINOETHANOL (CAS: 141-43-5)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	1 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	3.3 mg of substance/m3
Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	3.75 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	0.24 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term local effects.
DNEL :	2 mg of substance/m3

D-GLUCITOL, 1-DEOXY-1-(METHYLAMINO)-, N-C8-10 ACYL DERIVS. (CAS: 1591782-62-5)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	30 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	10.58 mg of substance/m3
Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	2.14 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	21.43 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.

DNEL : 3.73 mg of substance/m3

ETHANOL (CAS: 64-17-5)

Final use: **Workers.**
Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 343 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Short term local effects.
DNEL : 1900 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 950 mg of substance/m3

Final use: **Consumers.**
Exposure method: Ingestion.
Potential health effects: Short term systemic effects.
DNEL : 87 mg/kg body weight/day

Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 206 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Short term local effects.
DNEL : 950 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 114 mg of substance/m3

Predicted no effect concentration (PNEC):

PROPYLENE GLYCOL (CAS: 57-55-6)
Environmental compartment: Soil.
PNEC : 50 mg/kg

Environmental compartment: Fresh water.
PNEC : 206 mg/l

Environmental compartment: Sea water.
PNEC : 26 mg/l

PROPAN-2-OL (CAS: 67-63-0)
Environmental compartment: Soil.
PNEC : 28 mg/kg

Environmental compartment: Fresh water.
PNEC : 140.9 mg/l

Environmental compartment: Sea water.
PNEC : 140.9 mg/l

Environmental compartment: Intermittent waste water.
PNEC : 140.9 mg/l

Environmental compartment: Waste water treatment plant.

PNEC : 2251 mg/l

2-AMINOETHANOL (CAS: 141-43-5)

Environmental compartment: Soil.
PNEC : 0.035 mg/kg

Environmental compartment: Fresh water.
PNEC : 0.085 mg/l

Environmental compartment: Sea water.
PNEC : 0.0085 mg/l

Environmental compartment: Intermittent waste water.
PNEC : 0.025 mg/l

Environmental compartment: Fresh water sediment.
PNEC : 0.425 mg/kg

Environmental compartment: Marine sediment.
PNEC : 0.0425 mg/kg

Environmental compartment: Waste water treatment plant.
PNEC : 100 mg/l

D-GLUCITOL, 1-DEOXY-1-(METHYLAMINO)-, N-C8-10 ACYL DERIVS. (CAS: 1591782-62-5)

Environmental compartment: Soil.
PNEC : 36.6 mg/kg

Environmental compartment: Fresh water.
PNEC : 10 mg/l

Environmental compartment: Sea water.
PNEC : 1 mg/l

Environmental compartment: Intermittent waste water.
PNEC : 50 mg/l

Environmental compartment: Fresh water sediment.
PNEC : 94 mg/kg

Environmental compartment: Marine sediment.
PNEC : 9.4 mg/kg

ETHANOL (CAS: 64-17-5)

Environmental compartment: Soil.
PNEC : 0.63 mg/kg

Environmental compartment: Fresh water.
PNEC : 0.96 mg/l

Environmental compartment: Sea water.
PNEC : 0.79 mg/l

Environmental compartment: Intermittent waste water.
PNEC : 2.75 mg/l

Environmental compartment: Fresh water sediment.
PNEC : 3.6 mg/kg

Environmental compartment: Marine sediment.

PNEC :	2.9 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	580 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

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. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard ISO 16321.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Suitable type of protective boots :

In the event of minor spatter, wear protective boots or half-boots against chemical risks in accordance with standard EN13832-2.

In the event of prolonged contact, wear boots or half-boots with liquid-chemical-resistant and waterproof soles and uppers in accordance with standard EN13832-3.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state : Fluid liquid.

Colour

Colorless to pale yellow

Odour

Odour threshold : Not stated.

Unscented

Melting point

Melting point/melting range : Not specified.

Freezing point

Freezing point / Freezing range : Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range : Not specified.

Flammability

Flammability (solid, gas) :	Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.

Flash point

Flash point interval :	Not relevant.

Auto-ignition temperature

Self-ignition temperature :	Not specified.

Decomposition temperature

Decomposition point/decomposition range :	Not specified.

pH

pH :	11.20 . Slightly basic.
pH (aqueous solution) :	Not stated.

Kinematic viscosity

Viscosity :	Not stated.

Solubility

Water solubility :	Soluble.
Fat solubility :	Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water :	Not stated.

Vapour pressure

Vapour pressure (50°C) :	Not relevant.

Density and/or relative density

Density :	1.04 +/- 0.01 Method for determining the density : ISO 649-2 (Laboratory glassware - Density hydrometers for general purposes - Part 2: Test methods and use).

Relative vapour density

Vapour density :	Not stated.

Particle characteristics

The mixture does not contain nanoforms.

9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

Avoid :

- frost
- heat

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

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

11.1.1. Substances

a) Acute toxicity :

SODIUM HYDROXIDE (CAS: 1310-73-2)

Dermal route :	LD50 = 1350 mg/kg body weight Species : Rabbit

BENZOATE DE DENATONIUM (CAS: 3734-33-6)

Oral route :	LD50 = 584 mg/kg body weight Species : Rat
Dermal route :	LD50 > 2000 mg/kg body weight Species : Rat
Inhalation route (Dusts/mist) :	LC50 = 200 mg/m3 Species : Rat

PROPYLENE GLYCOL (CAS: 57-55-6)

Oral route :	LD50 > 5000 mg/kg body weight Species : Rat
Dermal route :	LD50 > 2000 mg/kg body weight Species : Rabbit

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Oral route :	LD50 = 795 mg/kg body weight

2-AMINOETHANOL (CAS: 141-43-5)

Oral route :	LD50 = 1089 mg/kg body weight Species : Rat OECD Guideline 401 (Acute Oral Toxicity)

D-GLUCITOL, 1-DEOXY-1-(METHYLAMINO)-, N-C8-10 ACYL DERIVS. (CAS: 1591782-62-5)

Oral route :	LD50 = 500 mg/kg body weight Species : Rat OECD Guideline 423 (Acute Oral toxicityAcute Toxic Class Method)
Dermal route :	LD50 > 2000 mg/kg body weight Species : Rat OECD Guideline 402 (Acute Dermal Toxicity)
Inhalation route (Dusts/mist) :	LC50 5 mg/l Species : Rat OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class (ATC) Method) Duration of exposure : 4 h

2-PROPYLHEPTANOLETHOXILATE (CAS: 160875-66-1)

Oral route :	LD50 > 301 mg/kg body weight Species : Rat

Dermal route : LD50 > 2000 mg/kg body weight

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)

Oral route : LD50 = 658 mg/kg body weight
Species : Rat

Dermal route : LD50 > 5000 mg/kg body weight
Species : Rat

ETHANOL (CAS: 64-17-5)

Oral route : LD50 = 10470 mg/kg body weight
Species : Rat
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD50 > 2000 mg/kg body weight
Species : Rabbit
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (n/a) : LC50 = 51 mg/l
Species : Rat
Duration of exposure : 4 h

b) Skin corrosion/skin irritation :

No data available.

c) Serious damage to eyes/eye irritation :

No data available.

d) Respiratory or skin sensitisation :

No data available.

e) Germ cell mutagenicity :

No data available.

f) Carcinogenicity :

No data available.

g) Reproductive toxicant :

No data available.

h) Specific target organ systemic toxicity - single exposure :

No data available.

i) Specific target organ systemic toxicity - repeated exposure :

No data available.

j) Aspiration hazard :

No data available.

11.1.2. Mixture

11.1.2.1 Information on hazard classes

a) Acute toxicity :

Oral route : No data available.
No data available.

Dermal route :
No data available.

Inhalation route (Dusts/mist) :

b) Skin corrosion/skin irritation :

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

c) Serious damage to eyes/eye irritation :

May have irreversible effects on the eyes, such as tissue damage in the eye, or serious physical decay of sight, which is not fully reversible by the end of observation at 21 days.

Serious eye damage is typified by the destruction of cornea, persistent corneal opacity and iritis.

d) Respiratory or skin sensitisation :

No data available.

e) Germ cell mutagenicity :

No data available.

f) Carcinogenicity :

No data available.

g) Reproductive toxicant :

No data available.

h) Specific target organ systemic toxicity - single exposure :

No data available.

i) Specific target organ systemic toxicity - repeated exposure :

No data available.

j) Aspiration hazard :

No data available.

11.1.2.2 Other information

11.2. Information on other hazards

Endocrine disrupting properties

The mixture does not contain any substance evaluated as an endocrine disruptor with effects on human health.

SECTION 12 : ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

BENZOATE DE DENATONIUM (CAS: 3734-33-6)

Fish toxicity :	LC50 = 8050 mg/l Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 13 mg/l Duration of exposure : 48 h

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Fish toxicity :	LC50 = 0.89 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 = 0.046 mg/l Factor M = 10 Species : Daphnia magna Duration of exposure : 48 h 0.001 < NOEC <= 0.01 mg/l Factor M = 1 OECD Guideline 211 (Daphnia magna Reproduction Test)
Algae toxicity :	ECr50 = 0.025 mg/l Factor M = 10 Species : Selenastrum capricornutum Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test) Duration of exposure : 21 days

2-AMINOETHANOL (CAS: 141-43-5)

Fish toxicity :	LC50 = 349 mg/l Species : Cyprinus carpio

	Duration of exposure : 96 h
	NOEC = 1.2 mg/l Species : Oryzias latipes
Crustacean toxicity :	EC50 = 65 mg/l Species : Daphnia magna Duration of exposure : 48 h
	NOEC = 0.85 mg/l Species : Daphnia magna Duration of exposure : 21 days OECD Guideline 211 (Daphnia magna Reproduction Test)
Algae toxicity :	ECr50 = 2.5 mg/l Species : Scenedesmus capricornutum Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)

D-GLUCITOL, 1-DEOXY-1-(METHYLAMINO)-, N-C8-10 ACYL DERIVS. (CAS: 1591782-62-5)

Fish toxicity :	LC50 > 100 mg/l Species : Danio rerio Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 > 100 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

ETHANOL (CAS: 64-17-5)

Fish toxicity :	LC50 = 13000 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 = 5012 mg/l Species : Ceriodaphnia dubia Duration of exposure : 48 h

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)

Fish toxicity :	LC50 = 0.49 mg/l Factor M = 1 Species : Brachydanio rerio Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 0.03 mg/l Species : Daphnia magna Duration of exposure : 48 h
Algae toxicity :	ECr50 = 0.12 mg/l Species : Scenedesmus capricornutum Duration of exposure : 72 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

The surfactants contained in this preparation 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 Member States and will be provided with their request or at the request of a detergent manufacturer.

12.2.1. Substances

BENZOATE DE DENATONIUM (CAS: 3734-33-6)
Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

PROPYLENE GLYCOL (CAS: 57-55-6)
Biodegradability : Rapidly degradable.

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)
Biodegradability : Rapidly degradable.

2-AMINOETHANOL (CAS: 141-43-5)
Biodegradability : Rapidly degradable.

D-GLUCITOL, 1-DEOXY-1-(METHYLAMINO)-, N-C8-10 ACYL DERIVS. (CAS: 1591782-62-5)
Biodegradability : Rapidly degradable.

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)
Biodegradability : Rapidly degradable.

ETHANOL (CAS: 64-17-5)
Biodegradability : Rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

DIDECYLDIMETHYLAMMONIUM CHLORIDE (CAS: 7173-51-5)
Bioaccumulation : BCF = 81

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

The mixture does not contain any substance evaluated as an endocrine disruptor with environmental effects.

12.7. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Exempt from transport classification and labelling.

14.1. UN number or ID number

-

14.2. UN proper shipping name

-

14.3. Transport hazard class(es)

-

14.4. Packing group

-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Maritime transport in bulk according to IMO instruments

-

SECTION 15 : REGULATORY INFORMATION

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

Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2023/707.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2024/2564. (ATP 22)

Container information:

No data available.

Particular provisions :

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture contains at least one restricted substance under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach. Please refer to Section 3 to identify the substance involved.

Authorisations agreed under Title VII of Regulation (EC) No.1907/2006 (REACH):

The mixture does not contain any substance subject to authorisation according to Annex XIV of REACH Regulation (EC) No 1907/2006: https://echa.europa.eu/fr/authorisation-list.

Substances that deplete the ozone layer (EC Regulation No. 1005/2009, Montreal Protocol) :

The mixture does not contain any substance posing a risk to the ozone layer.

Persistent organic pollutants (POP) (Regulation (EU) 2019/1021):

The mixture does not contain a persistent organic pollutant.

PIC Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (Rotterdam Convention):

The mixture is subject to the Prior Informed Consent (PIC) procedure.

The mixture contains a substance subject to the export notification procedure requirement.
7173-51-5 DIDECYLDIMETHYLAMMONIUM CHLORIDE

Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Labelling for detergents (EC Regulation No. 648/2004,907/2006) :

- 5 % or over but less than 15 % : non-ionic surfactants
- disinfectants

Labelling for biocidal products (Regulation (UE) n° 528/2012) :

Name	CAS	%	Product-type
DIDECYLDIMETHYLAMMONIUM CHLORIDE	7173-51-5	15.60 g/kg	02 04
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES	68424-85-1	2.40 g/kg	02 04

Product-type 2 : Disinfectants and algaecides not intended for direct application to humans or animals.

Product-type 4 : Food and feed area.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 :

Classification in accordance with Regulation (EC) No 1272/2008	Classification procedure
Skin Irrit. 2, H315	Calculation method.
Eye Dam. 1, H318	Calculation method.
Aquatic Chronic 3, H412	Calculation method.

Wording of the phrases mentioned in section 3 :

H225	Highly flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

UFI : Unique formulation identifier.

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

GHS05 : Corrosion

IATA : International Air Transport Association.

IMDG : International Maritime Dangerous Goods.

ICAO : International Civil Aviation Organisation

PBT: Persistent, bioaccumulable and toxic.

PIC: Prior Informed Consent.

POP: Persistent Organic Pollutant.

RID : Regulations concerning the International carriage of Dangerous goods by rail.
SVHC : Substances of very high concern.
vPvB : Very persistent, very bioaccumulable.
WGK : Wassergefahrdungsklasse (Water Hazard Class).