

**PROTECT & CLEAN - 4113211**

**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 : PROTECT & CLEAN

Product code : 4113211.

UFI : TGQ4-N09C-7001-ADXU

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

Acidic cleaner.

**1.3. Details of the supplier of the safety data sheet**

Registered company name : BAYROL Deutschland GmbH (EXPORT).

Address : Robert-Koch-Straße 4.82152.Planegg.GERMANY.

Telephone : +49 (0) 89 857 01-0. Fax : +49 (0) 89 857 01-276.

sds@bayrol.eu

www.bayrol.de

**1.4. Emergency telephone number : +32 70 245 245.**

Association/Organisation : Belgium : Centre Antipoison.

**Other emergency numbers**

Croatia : Telephone no +3851 2348 342

Greece : Poisons Information Center, Childrens Hospital PA Kyriakou, Tel +30 210 7793777

Cyprus : Cyprus Poison Center, Tel +357 1401

Latvia : State Fire and Rescue Service, phone number : 112. Poisoning and Drug Information Centre, Clinic of Toxicology and Sepsis, Hipokrata 2, Riga

Netherlands : NVIC: +31 (0)88 755 8000: Only for the purpose of informing medical personnel in case of acute intoxications

Poland : Tel : 112

Romania : Institutul National de Sanatate Publica Bucuresti, Str. Dr. Leonte Anastasievici nr.1-3 Sector 5, Bucuresti Tel. +40213183606

Slovenia : Phone number: 112

Slovakia : Phone number: NTCI : +421 2 5477 4166

**SECTION 2 : HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

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

Substance that is corrosive to metals, Category 1 (Met. Corr. 1, H290).

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).

Skin corrosion, Category 1B (Skin Corr. 1B, H314).

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

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

**2.2. Label elements**

Detergent mixture (see section 15).

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

Hazard pictograms :



GHS05



GHS07

Signal Word :

DANGER

Product identifiers :

EC 231-633-2

PHOSPHORIC ACID

EC 270-407-8

SODIUM (C14-16) OLEFIN SULFONATE

EC 246-807-3

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL

Hazard statements :

H290

May be corrosive to metals.

H302

Harmful if swallowed.

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H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.
Precautionary statements - General :	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
Precautionary statements - Prevention :	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
Precautionary statements - Response :	
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P310	Immediately call a POISON CENTER/doctor.
Precautionary statements - Storage :	
P405	Store locked up.
Precautionary statements - Disposal :	
P501	Dispose of contents/ container to an approved waste disposal plant.

**2.3. Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 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  $\geq 0.1\%$  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	%
CAS: 7664-38-2 EC: 231-633-2 REACH: 01-2119485924-24-XXXX  PHOSPHORIC ACID	GHS07, GHS05 Dgr Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318	B [1]	25 $\leq$ x % < 50
CAS: 107-98-2 EC: 203-539-1 REACH: 01-2119457435-35-XXXX  1-METHOXY-2-PROPANOL	GHS07, GHS02 Wng Flam. Liq. 3, H226 STOT SE 3, H336	[1]	2.5 $\leq$ x % < 10
CAS: 68439-57-6 EC: 270-407-8 REACH: 01-2119513401-57  SODIUM (C14-16) OLEFIN SULFONATE	GHS05 Dgr Skin Irrit. 2, H315 Eye Dam. 1, H318		2.5 $\leq$ x % < 10
CAS: 25307-17-9 EC: 246-807-3 REACH: 01-2119510876-35-XXXX  2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL	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 $\leq$ x % < 2.5
INDEX: 607-145-00-4 CAS: 75-75-2 EC: 200-898-6  METHANESULPHONIC ACID	GHS05 Dgr Skin Corr. 1B, H314	[1]	0 $\leq$ x % < 2.5

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CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25-XXXX PROPAN-2-OL	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]	0 <= x % < 2.5
CAS: 112-03-8 EC: 203-929-1 REACH: 01-2119970559-21-XXXX TRIMETHYLOCTADECYLAMMONIUM CHLORIDE	GHS06, GHS05, GHS09 Dgr Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 M Acute = 10 Aquatic Chronic 1, H410 M Chronic = 1		0 <= x % < 2.5
INDEX: 603-106-00-0 CAS: 1589-47-5 EC: 216-455-5 2-METHOXYPROPANOL	GHS02, GHS08, GHS05, GHS07 Dgr Flam. Liq. 3, H226 Repr. 1B, H360D STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318	[1] [2]	0 <= x % < 2.5

## Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 7664-38-2 EC: 231-633-2 REACH: 01-2119485924-24-XXXX PHOSPHORIC ACID	Skin Corr. 1B: H314 C>= 25% Skin Irrit. 2: H315 10% <= C < 25% Eye Dam. 1: H318 C>= 25% Eye Irrit. 2: H319 10% <= C < 25%	oral: ATE = 500 mg/kg BW
CAS: 107-98-2 EC: 203-539-1 REACH: 01-2119457435-35-XXXX 1-METHOXY-2-PROPANOL		oral: ATE = 4016 mg/kg BW
CAS: 25307-17-9 EC: 246-807-3 REACH: 01-2119510876-35-XXXX 2,2'-(OCTADEC-9-ENYLIMINO)BISETHANO L		oral: ATE = 1260 mg/kg BW
CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25-XXXX PROPAN-2-OL		inhalation: ATE = 25000 mg/l (vapours) dermal: ATE = 13900 mg/kg BW oral: ATE = 5840 mg/kg BW
CAS: 112-03-8 EC: 203-929-1 REACH: 01-2119970559-21-XXXX TRIMETHYLOCTADECYLAMMONIUM CHLORIDE		dermal: ATE = 528 mg/kg BW oral: ATE = 560.5 mg/kg BW

## Information on ingredients :

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

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

[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

## SECTION 4 : FIRST AID MEASURES

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

## 4.1. description of first aid measures

## In the event of exposure by inhalation :

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

## 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.

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**In the event of splashes or contact with skin :**

Remove any soiled or splashed clothing immediately.

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

If the contaminated area 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.

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

Seek medical attention immediately, showing the label.

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

Risk of strong eye injuries

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

Treat symptomatically.

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**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.

**5.3. Advice for firefighters**

No data available.

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**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.

Use drums to dispose of collected waste in compliance with current regulations (see section 13).

**6.3. Methods and material for containment and cleaning up**

Stop leak if safe to do so. Wipe up with absorbent material (eg. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. Ventilate the area and wash spill site after material pick-up is complete.

**6.4. Reference to other sections**

Disposal: see paragraph 13

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**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.

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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.

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.

Never open the packages under pressure.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in a corrosion-resistant container with a corrosion-resistant inner lining.

**Storage**

Keep out of reach of children.

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

Keep away from food and drink, including those for animals.

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.

Unsuitable packaging materials :

- Metal

**7.3. Specific end use(s)**

No data available.

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters****Occupational exposure limits :**

- European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m <sup>3</sup> :	VME-ppm :	VLE-mg/m <sup>3</sup> :	VLE-ppm :	Notes :
7664-38-2	1	-	2	-	-
107-98-2	375	100	568	150	Peau

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7664-38-2	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>			
107-98-2	100 ppm	150 ppm			
67-63-0	200 ppm	400 ppm		A4; BEI	

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes
7664-38-2		2E mg/m <sup>3</sup>		2(I)
107-98-2		100 ppm 370 mg/m <sup>3</sup>		2(I)
75-75-2		0.7 mg/m <sup>3</sup>		1(I)
67-63-0		200 ppm 500 mg/m <sup>3</sup>		2(II)
1589-47-5		5 ppm 19 mg/m <sup>3</sup>		2(I)

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m <sup>3</sup> :	VLE-ppm :	VLE-mg/m <sup>3</sup> :	Notes :	TMP No :
7664-38-2	0.2	1	0.5	2	-	-
107-98-2	50	188	100	375	*	84
67-63-0	-	-	400	980	-	84

- Switzerland (Suva 2021) :

CAS	VME	VLE	Valeur plafond	Notations
7664-38-2	2 ppm	4 ppm		

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107-98-2	100 ppm 360 mg/m <sup>3</sup>	200 ppm 720 mg/m <sup>3</sup>		
67-63-0	200 ppm 500 mg/m <sup>3</sup>	400 ppm 1000 mg/m <sup>3</sup>		
1589-47-5	5 ppm 19 mg/m <sup>3</sup>	40 ppm 152 mg/m <sup>3</sup>		

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
7664-38-2	1 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>			
107-98-2	100 ppm 375 mg/m <sup>3</sup>	150 ppm 560 mg/m <sup>3</sup>		Sk	
67-63-0	400 ppm 999 mg/m <sup>3</sup>	500 ppm 1250 mg/m <sup>3</sup>			

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

TRIMETHYLOCTADECYLAMMONIUM CHLORIDE (CAS: 112-03-8)

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Workers.**

Dermal contact.  
Long term systemic effects.  
4.7 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Dermal contact.  
Long term local effects.  
0.11 mg of substance/cm2

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Long term systemic effects.  
3.32 mg of substance/m3

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Man exposed via the environment.**

Ingestion.  
Long term systemic effects.  
2.83 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Dermal contact.  
Long term systemic effects.  
2.83 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Dermal contact.  
Long term local effects.  
0.06 mg of substance/cm2

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Long term systemic effects.  
0.98 mg of substance/m3

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

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Workers.**

Dermal contact.  
Long term systemic effects.  
888 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Long term systemic effects.  
500 mg of substance/m3

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Man exposed via the environment.**

Ingestion.  
Long term systemic effects.  
26 mg/kg body weight/day

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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

**2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL (CAS: 25307-17-9)**

**Final use:** **Workers.**  
Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 0.3 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 2.112 mg of substance/m3

**Final use:** **Man exposed via the environment.**  
Exposure method: Ingestion.  
Potential health effects: Long term systemic effects.  
DNEL : 0.214 mg/kg body weight/day

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 0.214 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 0.745 mg of substance/m3

**1-METHOXY-2-PROPANOL (CAS: 107-98-2)**

**Final use:** **Workers.**  
Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 183 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Short term systemic effects.  
DNEL : 553.5 mg of substance/m3

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 369 mg of substance/m3

**Final use:** **Man exposed via the environment.**  
Exposure method: Ingestion.  
Potential health effects: Long term systemic effects.  
DNEL : 33 mg/kg body weight/day

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 78 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 43.9 mg of substance/m3

**PHOSPHORIC ACID ...% (CAS: 7664-38-2)**

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**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Workers.**

Inhalation.  
Long term systemic effects.  
10.7 mg of substance/m3

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Long term local effects.  
1 mg of substance/m3

**Final use:**

Exposure method:  
Potential health effects:  
DNEL :

**Consumers.**

Ingestion.  
Long term systemic effects.  
0.1 mg/kg body weight/day

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Long term systemic effects.  
4.57 mg of substance/m3

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Long term local effects.  
0.36 mg of substance/m3

**Predicted no effect concentration (PNEC):**

**TRIMETHYLOCTADECYLAMMONIUM CHLORIDE (CAS: 112-03-8)**

Environmental compartment:  
PNEC : Soil.  
7 mg/kg

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

Environmental compartment:  
PNEC : Sea water.  
0.000068 mg/l

Environmental compartment:  
PNEC : Intermittent waste water.  
0.00037 mg/l

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

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

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

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

Environmental compartment:  
PNEC : Soil.  
28 mg/kg

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

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

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

Environmental compartment:  
Fresh water sediment.



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PNEC :	552 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	552 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	2251 mg/l

**2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL (CAS: 25307-17-9)**

Environmental compartment:	Soil.
PNEC :	5 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.214 µg/l
Environmental compartment:	Sea water.
PNEC :	0.0214 µg/l
Environmental compartment:	Intermittent waste water.
PNEC :	0.87 µg/l
Environmental compartment:	Fresh water sediment.
PNEC :	1.692 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.1692 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	1500 µg/l

**1-METHOXY-2-PROPANOL (CAS: 107-98-2)**

Environmental compartment:	Soil.
PNEC :	4.59 mg/kg
Environmental compartment:	Fresh water.
PNEC :	10 mg/l
Environmental compartment:	Sea water.
PNEC :	1 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	52.3 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	5.2 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	100 mg/l

## 8.2. Exposure controls

### Personal protection measures, such as 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. Ensure that there is adequate ventilation, especially in confined areas.

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**- 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 EN166.

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))

- PVC (polyvinyl chloride)

- Butyl Rubber (Isobutylene-isoprene copolymer)

**- 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.

Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained in good condition and cleaned after use.

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**

blue

**Odour**

Light.

Odour threshold : Not stated.

**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.

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**Auto-ignition temperature**

Self-ignition temperature : Not specified.

**Decomposition temperature**

Decomposition point/decomposition range : Not specified.

**pH**

pH : 1.00 .  
Strongly acidic.

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 : 1.235

**Relative vapour density**

Vapour density : Not stated.

**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**

Mixture which by chemical action can corrode and even destroy metals.

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

No data available.

**10.5. Incompatible materials**

Keep away from :

- metals
- bases

**10.6. Hazardous decomposition products**

No data available.

**SECTION 11 : TOXICOLOGICAL INFORMATION**

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

Harmful if swallowed.

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure between three minutes and one hour.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

**11.1.1. Substances**

**Acute toxicity :**

TRIMETHYLOCTADECYLAMMONIUM CHLORIDE (CAS: 112-03-8)

Oral route : LD50 = 560.5 mg/kg bodyweight/day

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Species : Rat  
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route :  
LD50 = 528 mg/kg bodyweight/day  
Species : Rabbit  
OECD Guideline 402 (Acute Dermal Toxicity)

PROPAN-2-OL (CAS: 67-63-0)  
Oral route :  
LD50 = 5840 mg/kg bodyweight/day  
Species : Rat

Dermal route :  
LD50 = 13900 mg/kg bodyweight/day  
Species : Rabbit

Inhalation route (Vapours) :  
LC50 = 25000 mg/m3  
Species : Rat

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL (CAS: 25307-17-9)  
Oral route :  
LD50 = 1260 mg/kg bodyweight/day  
Species : Rat  
OECD Guideline 401 (Acute Oral Toxicity)

1-METHOXY-2-PROPANOL (CAS: 107-98-2)  
Oral route :  
LD50 = 4016 mg/kg bodyweight/day  
Species : Rat

Dermal route :  
LD50 > 5000 mg/kg bodyweight/day  
Species : Rabbit

PHOSPHORIC ACID ...% (CAS: 7664-38-2)  
Oral route :  
LD50 = 500 mg/kg bodyweight/day

**Skin corrosion/skin irritation :**

TRIMETHYLOCTADECYLAMMONIUM CHLORIDE (CAS: 112-03-8)  
Corrosivity :  
Causes severe skin burns.  
Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Respiratory or skin sensitisation :**

TRIMETHYLOCTADECYLAMMONIUM CHLORIDE (CAS: 112-03-8)  
Buehler Test :  
Non-sensitiser.  
Species : Guinea pig  
OECD Guideline 406 (Skin Sensitisation)

**Germ cell mutagenicity :**

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL (CAS: 25307-17-9)  
Mutagenesis (in vitro) :  
Negative.  
Species : Bacteria  
Other guideline

Ames test (in vitro) :  
Negative.  
With or without metabolic activation.

TRIMETHYLOCTADECYLAMMONIUM CHLORIDE (CAS: 112-03-8)  
No mutagenic effect.  
OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Ames test (in vitro) :  
Negative.

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With or without metabolic activation.

**Specific target organ systemic toxicity - repeated exposure :**

TRIMETHYLOCTADECYLAMMONIUM CHLORIDE (CAS: 112-03-8)

Oral route : C = 113 mg/kg bodyweight/day  
Species : Rat  
Duration of exposure : 90 days  
OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Dermal route : C = 10 mg/kg bodyweight/day  
Species : Rabbit  
Duration of exposure : 90 days  
OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL (CAS: 25307-17-9)

Oral route : C = 30 mg/kg bodyweight/day  
Species : Rat  
Duration of exposure : 90 days  
OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

**11.1.2. Mixture**

**Serious damage to eyes/eye irritation :**

The risk of serious ocular lesions is based on the low/high pH and has been confirmed by tests.

**11.2. Information on other hazards**

**Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 67-63-0 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

**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**

PHOSPHORIC ACID ...% (CAS: 7664-38-2)

Crustacean toxicity : EC50 > 100 mg/l  
Species : Daphnia magna  
Duration of exposure : 48 h  
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity : ECr50 > 100 mg/l  
Species : Desmodesmus subspicatus  
Duration of exposure : 72 h  
OECD Guideline 201 (Alga, Growth Inhibition Test)

NOEC = 100 mg/l  
Species : Desmodesmus subspicatus  
Duration of exposure : 96 h  
OECD Guideline 201 (Alga, Growth Inhibition Test)

TRIMETHYLOCTADECYLAMMONIUM CHLORIDE (CAS: 112-03-8)

Fish toxicity : LC50 = 0.064 mg/l  
Species : Danio rerio  
Duration of exposure : 96 h  
OECD Guideline 203 (Fish, Acute Toxicity Test)

NOEC = 0.032 mg/l  
Factor M = 1  
Species : Pimephales promelas

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	Duration of exposure : 28 days
Crustacean toxicity :	EC50 = 0.037 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
	NOEC = 0.00415 mg/l Species : Daphnia magna Duration of exposure : 21 days OECD Guideline 211 (Daphnia magna Reproduction Test)
Algae toxicity :	ECr50 = 0.08 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)
2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL (CAS: 25307-17-9)	
Fish toxicity :	LC50 = 0.1 mg/l Species : Danio rerio Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 = 0.0473 mg/l Species : Daphnia magna Duration of exposure : 48 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Algae toxicity :	ECr50 = 0.00867 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)
1-METHOXY-2-PROPANOL (CAS: 107-98-2)	
Fish toxicity :	LC50 = 20800 mg/l Species : Pimephales promelas Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 23300 mg/l Species : Daphnia magna Duration of exposure : 48 h

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

**12.2. Persistence and degradability**

**12.2.1. Substances**

TRIMETHYLOCTADECYLAMMONIUM CHLORIDE (CAS: 112-03-8)	
Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.
2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL (CAS: 25307-17-9)	
Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.
1-METHOXY-2-PROPANOL (CAS: 107-98-2)	
Biodegradability :	Rapidly degradable.
PHOSPHORIC ACID ...% (CAS: 7664-38-2)	

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Biodegradability : no degradability data is available, the substance is considered as not degrading quickly.

**12.3. Bioaccumulative potential**

**12.3.1. Substances**

TRIMETHYLOCTADECYLAMMONIUM CHLORIDE (CAS: 112-03-8)

Octanol/water partition coefficient : log K<sub>ow</sub> = 3.61  
Other guideline

Bioaccumulation : BCF = 70.8

2,2'-(OCTADEC-9-ENYLIMINO)BISETHANOL (CAS: 25307-17-9)

Octanol/water partition coefficient : log K<sub>ow</sub> = 3.4

Bioaccumulation : BCF = 23.4

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Endocrine disrupting properties**

No data available.

**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**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2020 [40-20] - ICAO/IATA 2023 [64]).

**14.1. UN number or ID number**

1805

**14.2. UN proper shipping name**

UN1805=PHOSPHORIC ACID, SOLUTION

**14.3. Transport hazard class(es)**

- Classification :



8

**14.4. Packing group**

III

**14.5. Environmental hazards**

-

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ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C1	III	8	80	5 L	-	E1	3	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	8	-	III	5 L	F-A. S-B	223	E1	Category A	SGG1 SG36 SG49

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	III	852	5 L	856	60 L	A3 A803	E1
	8	-	III	Y841	1 L	-	-	A3 A803	E1

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

**14.7. Maritime transport in bulk according to IMO instruments**

No data available.

**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. 2022/692 (ATP 18)

**Container information:**

No data available.

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

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):  
<https://echa.europa.eu/substances-restricted-under-reach>.

**Explosives precursors :**

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

**Particular provisions :**

No data available.

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

- less than 5 % : anionic surfactants

**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.

**Wording of the phrases mentioned in section 3 :**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360D	May damage the unborn child.
H400	Very toxic to aquatic life.



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H410

Very toxic to aquatic life with long lasting effects.

**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

CMR: Carcinogenic, mutagenic or reprotoxic.

UFI : Unique formulation identifier.

STEL : Short-term exposure limit

TWA : Time Weighted Averages

TMP : French Occupational Illness table

TLV : Threshold Limit Value (exposure)

AEV : Average Exposure Value.

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

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.