SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

1.1. Product identifier

Product name : CASQUE 9

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

Helmet cleaner.

1.3. Details of the supplier of the safety data sheet

Registered company name : QUATRIS.

Address : 730 Chemin des Entrepreneurs.82270.MONTPEZAT DE QUERCY.FRANCE.

Telephone : +33 (0)5 63 27 16 58. Fax : +33 (0)5 63 27 16 54.

contact@quatris-sa.com

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

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

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Aerosol, Category 1 (Aerosol 1, H222 - H229).

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

Eye irritation, Category 2 (Eye Irrit. 2, H319).

Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H336).

Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).

2.2. Label elements

Detergent mixture (see section 15).

Mixture for aerosol application.

Use only for the planned use and according to the insructions.

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

Hazard pictograms :

GHS07 GHS09 GHS02

Signal Word :

DANGER

Product identifiers :

EC 931-254-9	HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE
EC 200-661-7	PROPAN-2-OL
EC 201-159-0	2-BUTANONE
603-117-00-0	PROPAN-2-OL

Hazard statements :

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements - General :	
P102	Keep out of reach of children.
Precautionary statements - Prevention :	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - Response :	
P302 + P352	IF ON SKIN: Wash with plenty of water/...
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/.../if you feel unwell.
P391	Collect spillage.
Precautionary statements - Storage :	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P410 + P412	Protect from sunlight. Do no expose to temperatures exceeding 50 oC/122oF.
Precautionary statements - Disposal :	
P501	Dispose of contents and container in accordance with your local or national regulatory autorities.

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 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.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
CAS: 64-17-5 EC: 200-578-6 REACH: 01-2119457610-43 ETHYL ALCOHOL	GHS07 Wng Eye Irrit. 2, H319	[1]	25 <= x % < 50
EC: 931-254-9 REACH: 01-2119484651-34 HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE	GHS07, GHS09, GHS08, GHS02 Dgr Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411		25 <= x % < 50
CAS: 124-38-9 EC: 204-696-9 CARBON DIOXIDE	GHS04 Wng Press. Gas, H280	[1] [7]	2.5 <= x % < 10
CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25 PROPAN-2-OL	GHS07 Wng Eye Irrit. 2, H319 STOT SE 3, H336	[1]	2.5 <= x % < 10
CAS: 78-93-3 EC: 201-159-0 REACH: 01-2119457290-43-xxxx 2-BUTANONE	GHS02, GHS07 Dgr Eye Irrit. 2, H319 Flam. Liq. 2, H225 STOT SE 3, H336	[1]	1 <= x % < 2.5

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	[1]	1 <= x % < 2.5
CAS: 68424-85-1 EC: 270-325-2 COMPOSES DE L'ION AMMONIUM QUATERNAIRE, BENZYL EN C12-16 ALKYLDIMETHYLES, CHLORURES	GHS07, GHS05, GHS09 Dgr Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1		0 <= x % < 1

Information on ingredients :

[7] Propellant gas

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

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 exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In the event of splashes or contact with eyes :

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

If there is any redness, pain or visual impairment, consult an ophthalmologist.

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 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.

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

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- halon
- foam
- multipurpose ABC powder

- BC powder
- carbon dioxide (CO2)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

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

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

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

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.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

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

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.

Remove contaminated clothing and protective equipment before entering eating areas.

Fire prevention :

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Do not spray on a naked flame or any incandescent material.

Do not pierce or burn, even after use.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

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.

Do not breathe in aerosols.

Avoid inhaling vapors.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Avoid skin and eye contact with this mixture.

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

No data available.

Storage

Keep out of reach of children.

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

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

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.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

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 (2017/164/UE, 2009/161/UE, 2006/15/CE, 2000/39/CE, 98/24/CE)

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
124-38-9	9000	5000	-	-	-
78-93-3	600	200	900	300	-

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

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
64-17-5		1000 ppm		A3	
124-38-9	5000 ppm	30,000 ppm			
67-63-0	200 ppm	400 ppm		A4; BEI	
78-93-3	200 ppm	300 ppm		BEI	
67-63-0	200 ppm	400 ppm		A4; BEI	

- France (INRS - ED984 :2012) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
64-17-5	1000	1900	5000	9500	-	84
124-38-9	5000	9000	-	-	-	-
67-63-0	-	-	400	980	-	84
78-93-3	200	600	300	900	*	84
67-63-0	-	-	400	980	-	84

- Spain (Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), Mayo 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
64-17-5	1000 ppm 1910 mg/m3				

124-38-9	5000 ppm 9150 mg/m3				
67-63-0	400 ppm 998 mg/m3	500 ppm 1250 mg/m3			
78-93-3	200 ppm 600 mg/m3	300 ppm 900 mg/m3			
67-63-0	400 ppm 998 mg/m3	500 ppm 1250 mg/m3			

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
64-17-5	1000 ppm 1920 mg/m3				
124-38-9	5000 ppm 9150 mg/m3	15000 ppm 27400 mg/m3			
67-63-0	400 ppm 999 mg/m3	500 ppm 1250 mg/m3			
78-93-3	200 ppm 600 mg/m3	300 ppm 899 mg/m3		SkBMGV	
67-63-0	400 ppm 999 mg/m3	500 ppm 1250 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-BUTANONE (CAS: 78-93-3)

Final use: **Workers.**
Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 1161 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 600 mg of substance/m3

Final use: **Consumers.**
Exposure method: Ingestion.
Potential health effects: Long term systemic effects.
DNEL : 31 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects:	Long term systemic effects.
DNEL :	412 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	106 mg of substance/m3

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

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	13964 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	5306 mg of substance/m3
Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	1301 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	1377 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	1137 mg of substance/m3

ETHYL ALCOHOL (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:	Long 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):

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-BUTANONE (CAS: 78-93-3)

Environmental compartment:	Soil.
PNEC :	22.5 mg/kg
Environmental compartment:	Fresh water.
PNEC :	55.8 mg/l
Environmental compartment:	Sea water.
PNEC :	55.8 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	55.8 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	284.7 mg/kg
Environmental compartment:	Waste water treatment plant.

PNEC : 709 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

ETHYL ALCOHOL (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

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.

- 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 EN374.

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))
- PVA (Polyvinyl alcohol)

Recommended properties :

- Impervious gloves in accordance with standard EN374

- 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 to prevent skin contact.

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

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.

- Respiratory protection

Avoid breathing vapours.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Type of FFP mask :

Wear a disposable half-mask aerosol filter in accordance with standard EN149.

Category :

- FFP1

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

Particle filter according to standard EN143 :

- P1 (White)

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	Fluid liquid.
	Spray.
Color :	Colorless.

Important health, safety and environmental information

pH :	Not relevant.
Boiling point/boiling range :	Not specified.
Vapour pressure (50°C) :	Above 300 kPa (3 bar).
Density :	0.670 g/cm3
Water solubility :	Insoluble.
Melting point/melting range :	Not specified.
Self-ignition temperature :	Not specified.
Decomposition point/decomposition range :	Not specified.
Chemical combustion heat :	Not specified.
Inflammation time :	Not specified.
Deflagration density :	Not specified.
Inflammation distance :	Not specified.
Flame height :	Not specified.
Flame duration :	Not specified.
Flash point :	< 0 °C

9.2. Other information

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

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- heating
- heat

10.5. Incompatible materials

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 toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

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.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage

Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.

Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

11.1.1. Substances

Acute toxicity :

COMPOSES DE L'ION AMMONIUM QUATERNAIRE, BENZYL EN C12-16 ALKYLDIMETHYLES, CHLORURES (CAS: 68424-85-1)

Oral route :	LD50 = 795 mg/kg Species : Rat

2-BUTANONE (CAS: 78-93-3)

Oral route :	LD50 = 4000 mg/kg
Inhalation route (n/a) :	LC50 = 34 mg/l

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

Oral route :	LD50 = 5840 mg/kg Species : Rat OECD Guideline 401 (Acute Oral Toxicity)
Dermal route :	LD50 = 13900 mg/kg Species : Rabbit OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (n/a) : LC50 > 25 mg/l
Species : Rat

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE
Oral route : LD50 = 5000 mg/kg
Species : Rat

Dermal route : LD50 = 3000 mg/kg
Species : Rabbit

Inhalation route (n/a) : LC50 = 20 mg/l
OECD Guideline 403 (Acute Inhalation Toxicity)

ETHYL ALCOHOL (CAS: 64-17-5)
Oral route : LD50 = 10470 mg/kg
Species : Rat
OECD Guideline 401 (Acute Oral Toxicity)

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

Inhalation route (n/a) : LC50 = 51 mg/l
Species : Rat
OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/skin irritation :

COMPOSES DE L'ION AMMONIUM QUATERNAIRE, BENZYL EN C12-16 ALKYLDIMETHYLES, CHLORURES (CAS: 68424-85-1)
Corrosivity : Causes severe skin burns.
Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Respiratory or skin sensitisation :

ETHYL ALCOHOL (CAS: 64-17-5)
Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.
Species : Guinea pig

COMPOSES DE L'ION AMMONIUM QUATERNAIRE, BENZYL EN C12-16 ALKYLDIMETHYLES, CHLORURES (CAS: 68424-85-1)
Local lymph node stimulation test : Non-Sensitiser.
Species : Guinea pig
OECD Guideline 406 (Skin Sensitisation)

11.1.2. Mixture

No toxicological data available for the mixture.

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

CAS 64-17-5 : IARC Group 1 : The agent is carcinogenic to humans.

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

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

SECTION 12 : ECOLOGICAL INFORMATION

Toxic 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

COMPOSES DE L'ION AMMONIUM QUATERNAIRE, BENZYL EN C12-16 ALKYLDIMETHYLES, CHLORURES (CAS: 68424-85-1)

Fish toxicity :	LC50 = 0.85 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h OECD Guideline 203 (Fish, Acute Toxicity Test)
Crustacean toxicity :	EC50 = 0.016 mg/l Species : Daphnia magna Duration of exposure : 48 h NOEC = 0.025 mg/l Species : Daphnia magna Duration of exposure : 21 days
Algae toxicity :	ECr50 = 0.025 mg/l Species : Selenastrum capricornutum Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test) EC10 mg/l Species : Selenastrum capricornutum Duration of exposure : 72 h

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

Fish toxicity :	LC50 = 9640 mg/l Species : Pimephales promelas Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 9714 mg/l Species : Daphnia magna Duration of exposure : 24 h
Algae toxicity :	ECr50 > 100 mg/l Species : Scenedesmus subspicatus Duration of exposure : 72 h
Aquatic plant toxicity :	ECr50 > 100 mg/l

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

Fish toxicity :	LC50 <= 100 mg/l
Crustacean toxicity :	EC50 <= 10 mg/l
Aquatic plant toxicity :	ECr50 <= 100 mg/l

ETHYL ALCOHOL (CAS: 64-17-5)

Fish toxicity :	LC50 = 15300 mg/l Species : Pimephales promelas Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 858 mg/l Species : Artemia salina Duration of exposure : 24 h OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Algae toxicity :	ECr50 = 275 mg/l Species : Chlorella vulgaris Duration of exposure : 72 h OECD Guideline 201 (Alga, Growth Inhibition Test)

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

COMPOSES DE L'ION AMMONIUM QUATERNAIRE, BENZYL EN C12-16 ALKYLDIMETHYLES, CHLORURES (CAS: 68424-85-1)

Biodegradability : Rapidly degradable.

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

Biodegradability : Rapidly degradable.

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

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

ETHYL ALCOHOL (CAS: 64-17-5)

Biodegradability : Rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

COMPOSES DE L'ION AMMONIUM QUATERNAIRE, BENZYL EN C12-16 ALKYLDIMETHYLES, CHLORURES (CAS: 68424-85-1)

Octanol/water partition coefficient : log Koe = 2.88
OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

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

Octanol/water partition coefficient : log Koe = 0.05
OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

HYDROCARBONS, C6, ISOALKANES, <5% N-HEXANE

Octanol/water partition coefficient : log Koe = 4

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. 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, preferably 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 2017 - IMDG 2016 - ICAO/IATA 2017).

14.1. UN number

1950

14.2. UN proper shipping name

UN1950=AEROSOLS, flammable

14.3. Transport hazard class(es)

- Classification :

2.1

14.4. Packing group

-

14.5. Environmental hazards

- Environmentally hazardous material :

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	2	5F	-	2.1	-	1 L	190 327 344 625	E0	2	D

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	2	See SP63	-	See SP277	F-D,S-U	63 190 277 327 344 381 959	E0

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	2.1	-	-	Forbidden	Forbidden	203	150 kg	A1 A145 A167 A802	E0
	2.1	-	-	Forbidden	Forbidden	-	-	A1 A145 A167 A802	E0

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

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:

- Directive 75/324/CEE modified by directive 2013/10/UE
- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 1297/2014.

- Container information:

No data available.

- Particular provisions :

No data available.

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

- allergenic fragrances :

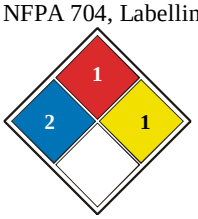
hydroxycitronellal

d-limonene

linalool

- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704) :

NFPA 704, Labelling: Health=2 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



- Swiss ordinance on the incentive tax on volatile organic compounds :

78-93-3	butanone (méthyléthylcétone)
64-17-5	éthanol, seulement s'il s'agit d'alcools impropres à la consommation (art. 31 de la loi fédérale sur l'alcool)
64-17-5	éthanol, seulement s'il s'agit d'alcools impropres à la consommation (art. 31 de la loi fédérale sur l'alcool)
5989-27-5	D-limonène ([R]-p-mentha-1,8-diene)
140-11-4	acétate de benzyle
141-78-6	acétate d'éthyle
67-63-0	propane-2-ol (alcool isopropylique)
67-63-0	propane-2-ol (alcool isopropylique)

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.
H280	Contains gas under pressure; may explode if heated.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye 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.

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

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 : Wassergefahrdungsklasse (Water Hazard Class).
GHS02 : Flame
GHS07 : Exclamation mark
GHS09 : Environment
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.