

**THUNDERBOLT**

**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 : THUNDERBOLT  
UFI : FASQ-TCXC-EKKE-K813

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

Cleaning wipes : cars and motorcycles.

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

Registered company name : UNPASS, A brand of SABE Industry Group.  
Address : 730 Chemin des Entrepreneurs.82270.MONTPEZAT DE QUERCY.FRANCE.  
Telephone : +33 (0)5 63 27 27 20. Fax : .  
contact@unpass.eu  
www.unpass.eu

**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.**

Flammable liquid, Category 2 (Flam. Liq. 2, H225).  
Repeated exposure may cause skin dryness or cracking (EUH066).  
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 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 :



GHS02



GHS07

Signal Word :

DANGER

Product identifiers :

EC 200-662-2 ACETONE

Hazard statements :

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

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 :

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P261	Avoid breathing vapours.
P264	Wash hands thoroughly after handling.

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## THUNDERBOLT

P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves, eye protection and face protection.
Precautionary statements - Response :	
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.
P337 + P313	If eye irritation persists: Get medical advice/attention.
Precautionary statements - Storage :	
P405	Store locked up.
Precautionary statements - Disposal :	
P501	Dispose of contents and container in accordance with your local or national regulatory authorities.
Other information :	
	Use only for the intended use and in accordance with the user guide.

### 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.

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

#### Composition :

Identification	(EC) 1272/2008	Note	%
INDEX: 606_001_00_8 CAS: 67-64-1 EC: 200-662-2 REACH: 01-2119471220-49	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH:066	[1]	10 $\leq$ x % < 25
ACETONE			
INDEX: 607_195_00_7 CAS: 108-65-6 EC: 203-603-9 REACH: 01-2119475791-29	GHS02 Wng Flam. Liq. 3, H226	[1]	10 $\leq$ x % < 25
2-METHOXY-1-METHYLETHYL ACETATE			
INDEX: 918_167_1 EC: 918-167-1 REACH: 01-2119472146-39	GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 EUH:066		2.5 $\leq$ x % < 10
HYDROCARBURES EN C11-C12, ISOALCANES, $\leq 2\%$ EN AROMATIQUES			
INDEX: 603_117_00_0 CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]	2.5 $\leq$ x % < 10
PROPAN-2-OL			
INDEX: 603_064_00_3 CAS: 107-98-2 EC: 203-539-1 REACH: 01-2119457435-35	GHS07 Wng STOT SE 3, H336	[1]	2.5 $\leq$ x % < 10
MONOPROPYLENE GLYCOL METHYL ETHER			
INDEX: 68920661 CAS: 68920-66-1	GHS07, GHS09 Wng Skin Irrit. 2, H315 Aquatic Chronic 1, H410 M Chronic = 1		0 $\leq$ x % < 2.5
ETHER POLYGLYCOLIQUE D'ALCOOL GRAS			

## THUNDERBOLT

INDEX: 68424851 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 = 10 Aquatic Chronic 1, H410 M Chronic = 1	0 ≤ x % < 2.5
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(Full text of H-phrases: see section 16)

### Information on ingredients :

[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 :

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, 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

The product is impregnated on a wipe, splashing and aerosol formation are considered unlikely.

Inhalation : Drowsiness, dizziness, irritation of the respiratory tract.

Contact with eyes : Severe eye irritation.

Contact with skin : The repeated exposure may cause skin dryness or cracking.

Swallowing : High concentrations can cause damage to the digestive tract, liver, kidneys, and nervous system.

### 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

## THUNDERBOLT

- BC powder
- carbon dioxide (CO<sub>2</sub>)

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 (CO<sub>2</sub>)

### 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.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged: always ground when decanting. Wear antistatic shoes and clothing and make floors of non-conductive

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.

## THUNDERBOLT

### Recommended equipment and procedures :

- For personal protection, see section 8.
- Observe precautions stated on label and also industrial safety regulations.
- 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.
- Avoid accumulation of electrostatic charges.
- 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 (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 :
67-64-1	1210	500	-	-	-
108-65-6	275	50	550	100	Peau
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 :
67-64-1	500 ppm	750 ppm		A4; BEI	
67-63-0	200 ppm	400 ppm		A4; BEI	
107-98-2	100 ppm	150 ppm			

- Germany - AGW (BAuA - TRGS 900, 08/08/2019) :

CAS	VME :	VME :	Excess	Notes
67-64-1		500 ppm 1200 mg/m <sup>3</sup>		2(I)
108-65-6		50 ppm 270 mg/m <sup>3</sup>		1(I)
67-63-0		200 ppm 500 mg/m <sup>3</sup>		2(II)
107-98-2		100 ppm 370 mg/m <sup>3</sup>		2(I)

- France (INRS - ED984 / 2020-1546) :

CAS	VME-ppm :	VME-mg/m <sup>3</sup> :	VLE-ppm :	VLE-mg/m <sup>3</sup> :	Notes :	TMP No :
67-64-1	500	1210	1000	2420	-	84

## THUNDERBOLT

108-65-6	50	275	100	550	-	-
67-63-0	-	-	400	980	-	84
107-98-2	50	188	100	375	*	84

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

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	500 ppm 1210 mg/m <sup>3</sup>	1500 ppm 3620 mg/m <sup>3</sup>			
108-65-6	50 ppm 274 mg/m <sup>3</sup>	100 ppm 548 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>			
107-98-2	100 ppm 375 mg/m <sup>3</sup>	150 ppm 560 mg/m <sup>3</sup>		Sk	

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

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

#### Final use:

Exposure method:  
Potential health effects:  
DNEL :

#### Workers.

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

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Long term systemic effects.  
369 mg of substance/m<sup>3</sup>

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Short term local effects.  
553.5 mg of substance/m<sup>3</sup>

#### Final use:

Exposure method:  
Potential health effects:  
DNEL :

#### Consumers.

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

Exposure method:  
Potential health effects:  
DNEL :

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

Exposure method:  
Potential health effects:  
DNEL :

Inhalation.  
Long term systemic effects.  
43.9 mg of substance/m<sup>3</sup>

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/m<sup>3</sup>

#### Final use:

Exposure method:  
Potential health effects:  
DNEL :

#### Consumers.

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

Exposure method:  
Potential health effects:

Dermal contact.  
Long term systemic effects.

## THUNDERBOLT

DNEL : 319 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 89 mg of substance/m3

### 2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

#### **Final use:** **Workers.**

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 153.5 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 275 mg of substance/m3

#### **Final use:** **Consumers.**

Exposure method: Ingestion.  
Potential health effects: Long term systemic effects.  
DNEL : 1.67 mg/kg body weight/day

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 54.8 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 33 mg of substance/m3

### ACETONE (CAS: 67-64-1)

#### **Final use:** **Workers.**

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 186 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term local effects.  
DNEL : 2420 mg of substance/m3

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 1210 mg of substance/m3

#### **Final use:** **Consumers.**

Exposure method: Ingestion.  
Potential health effects: Long term systemic effects.  
DNEL : 62 mg/kg body weight/day

Exposure method: Dermal contact.  
Potential health effects: Long term systemic effects.  
DNEL : 62 mg/kg body weight/day

Exposure method: Inhalation.  
Potential health effects: Long term systemic effects.  
DNEL : 200 mg of substance/m3

**THUNDERBOLT**

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

**MONOPROPYLENE GLYCOL METHYL ETHER (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
Environmental compartment:	Intermittent waste water.
PNEC :	100
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

**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-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)**

Environmental compartment:	Soil.
PNEC :	0.29 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.635 mg/l
Environmental compartment:	Sea water.
PNEC :	0.0635 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	6.35 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	3.29 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.329 mg/kg
Environmental compartment:	Waste water treatment plant.



## THUNDERBOLT

PNEC :	100 mg/l
ACETONE (CAS: 67-64-1)	
Environmental compartment:	Soil.
PNEC :	29.5 mg/kg
Environmental compartment:	Fresh water.
PNEC :	10.6 mg/l
Environmental compartment:	Sea water.
PNEC :	1.06 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	21 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	30.4 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	3.04 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	100 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 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))

- PVA (Polyvinyl alcohol)

Recommended properties :

- Impervious gloves in accordance with standard EN ISO 374-2

#### - 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.

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

## THUNDERBOLT

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.

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

- A1 (Brown)

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

#### General information :

Physical state :	Fluid liquid.
Liquid on wipes.	
Color :	Colorless / Yellow clear.
Odor :	Peach.

#### Important health, safety and environmental information

pH :	Not relevant.
Boiling point/boiling range :	> 35°C
Flash Point Interval :	FP < 23°C
Vapour pressure (50°C) :	Not relevant.
Density :	0.9 +/- 0.08
Water solubility :	Insoluble.
Viscosity:	$\nu < 7 \text{ mm}^2/\text{s}$ (40°C)
Melting point/melting range :	Not specified.
Self-ignition temperature :	Not specified.
Decomposition point/decomposition range :	Not specified.

### 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 :

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces
- frost

### 10.5. Incompatible materials

Keep away from :

- oxidising agents
- strong acids
- strong bases

## THUNDERBOLT

### 10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

## 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.

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 ALKYL DIMETHYLES, CHLORURES (CAS: 68424-85-1)

Oral route : LD<sub>50</sub> = 795 mg/kg  
Species : Rat

ETHER POLYGLYCOLIQUE D'ALCOOL GRAS (CAS: 68920-66-1)

Oral route : LD<sub>50</sub> > 2000 mg/kg  
Species : Rat

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

Oral route : LD<sub>50</sub> = 4016 mg/kg  
Species : Rat

Dermal route : LD<sub>50</sub> > 2000 mg/kg  
Species : Rabbit

Inhalation route (n/a) : LC<sub>50</sub> > 25.8 mg/l  
Species : Rat

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

Oral route : LD<sub>50</sub> = 5840 mg/kg  
Species : Rat  
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD<sub>50</sub> = 13900 mg/kg  
Species : Rabbit  
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (n/a) : LC<sub>50</sub> 25

HYDROCARBURES EN C11-C12, ISOALCANES, <2% EN AROMATIQUES

Oral route : LD<sub>50</sub> > 5000 mg/kg  
Species : Rat  
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD<sub>50</sub> > 5000 mg/kg  
Species : Rabbit  
OECD Guideline 402 (Acute Dermal Toxicity)

2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

## THUNDERBOLT

Oral route : LD50 > 5000 mg/kg  
Species : Rat

Dermal route : LD50 > 2000 mg/kg  
Species : Rat

Inhalation route (n/a) : LC50 > 4345 ppm  
Species : Rat

### ACETONE (CAS: 67-64-1)

Oral route : LD50 = 5800 mg/kg  
Species : Rat  
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD50 > 15800 mg/kg  
Species : Rabbit

Inhalation route (n/a) : LC50 = 76 mg/l  
Species : Rat  
Duration of exposure : 4 h

### Skin corrosion/skin irritation :

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

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

#### 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)

#### ETHER POLYGLYCOLIQUE D'ALCOOL GRAS (CAS: 68920-66-1)

Species : Rabbit  
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

### Respiratory or skin sensitisation :

#### 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)

#### ACETONE (CAS: 67-64-1)

Local lymph node stimulation test : Non-Sensitiser.  
Species : Guinea pig  
OECD Guideline 406 (Skin Sensitisation)

### Germ cell mutagenicity :

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

No mutagenic effect.

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

No mutagenic effect.

#### HYDROCARBURES EN C11-C12, ISOALCANES, <2% EN AROMATIQUES

No mutagenic effect.

#### ACETONE (CAS: 67-64-1)

## THUNDERBOLT

No mutagenic effect.

Mutagenesis (in vivo) :

Negative.  
Species : Mouse

Mutagenesis (in vitro) :

Negative.  
OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)

### Carcinogenicity :

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

Carcinogenicity Test :  
Negative.  
No carcinogenic effect.

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

Carcinogenicity Test :  
Negative.  
No carcinogenic effect.

HYDROCARBURES EN C11-C12, ISOALCANES, <2% EN AROMATIQUES

Carcinogenicity Test :  
Negative.  
No carcinogenic effect.  
OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

ACETONE (CAS: 67-64-1)

Carcinogenicity Test :  
Negative.  
No carcinogenic effect.

### Reproductive toxicant :

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

No toxic effect for reproduction

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

No toxic effect for reproduction

HYDROCARBURES EN C11-C12, ISOALCANES, <2% EN AROMATIQUES

No toxic effect for reproduction

ACETONE (CAS: 67-64-1)

No toxic effect for reproduction

Study on fertility :  
Species : Rat  
OECD Guideline 414 (Prenatal Developmental Toxicity Study)

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

ACETONE (CAS: 67-64-1)

Oral route :  
C = 900 mg/kg bodyweight/day  
Species : Rat  
Duration of exposure : 90 days  
OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

### 11.1.2. Mixture

No toxicological data available for the mixture.

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

CAS 123-35-3 : IARC Group 2B : The agent is possibly carcinogenic to humans.

CAS 97-53-0 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 128-37-0 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 5989-27-5 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 140-11-4 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

## THUNDERBOLT

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

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  
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)  
  
EC10 mg/l  
Factor M = 1  
Species : *Selenastrum capricornutum*  
Duration of exposure : 72 h  
OECD Guideline 201 (Alga, Growth Inhibition Test)

ETHER POLYGLYCOLIQUE D'ALCOOL GRAS (CAS: 68920-66-1)

Fish toxicity : LC50 > 10 mg/l  
Species : *Danio rerio*  
Duration of exposure : 96 h  
OECD Guideline 203 (Fish, Acute Toxicity Test)

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

Fish toxicity : LC50 = 6812 mg/l  
Species : *Leuciscus idus*  
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 21100-25900 mg/l  
Species : *Daphnia magna*  
Duration of exposure : 48 h

Algae toxicity : Species : *Scenedesmus acutus*

EC50 mg/l  
Species : *Pseudokirchnerella subcapitata*  
Duration of exposure : 7 days

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

## THUNDERBOLT

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

### HYDROCARBURES EN C11-C12, ISOALCANES, <2% EN AROMATIQUES

Fish toxicity : LC50 > 1000 mg/l  
Species : Oncorhynchus mykiss  
Duration of exposure : 96 h  
OECD Guideline 203 (Fish, Acute Toxicity Test)

NOEC = 0.103 mg/l  
Species : Oncorhynchus mykiss  
Duration of exposure : 28 days  
Other guideline

Crustacean toxicity : EC50 > 1000 mg/l  
Species : Daphnia magna  
Duration of exposure : 48 h  
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

NOEC > 1 mg/l  
Species : Daphnia magna  
Duration of exposure : 21 days  
OECD Guideline 211 (Daphnia magna Reproduction Test)

Algae toxicity : ECr50 > 1000 mg/l  
Species : Pseudokirchnerella subcapitata  
Duration of exposure : 72 h  
OECD Guideline 201 (Alga, Growth Inhibition Test)

NOEC = 1000 mg/l  
Species : Pseudokirchnerella subcapitata  
Duration of exposure : 72 h  
OECD Guideline 201 (Alga, Growth Inhibition Test)

### 2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

Fish toxicity : LC50 = 134 mg/l  
Species : Oncorhynchus mykiss  
Duration of exposure : 96 h  
OECD Guideline 203 (Fish, Acute Toxicity Test)

NOEC = 47.5 mg/l  
Species : Oryzias latipes  
Duration of exposure : 14 days  
OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study)

Crustacean toxicity : EC50 > 500 mg/l  
Species : Daphnia magna

## THUNDERBOLT

Duration of exposure : 48 h  
REACH Method C.2 (Acute Toxicity for Daphnia)

NOEC >= 100 mg/l  
Species : *Daphnia cucullata*  
Duration of exposure : 21 days  
OECD Guideline 202 (*Daphnia* sp. Acute Immobilisation Test)

Algae toxicity :  
ECr50 > 1000 mg/l  
Species : *Selenastrum capricornutum*  
Duration of exposure : 72 h  
OECD Guideline 201 (Alga, Growth Inhibition Test)

ACETONE (CAS: 67-64-1)  
Fish toxicity :  
LC50 = 5540 mg/l  
Species : *Oncorhynchus mykiss*  
Duration of exposure : 96 h  
OECD Guideline 203 (Fish, Acute Toxicity Test)

Crustacean toxicity :  
EC50 = 8800 mg/l  
Species : *Daphnia pulex*  
Duration of exposure : 48 h  
NOEC = 2212 mg/l  
Species : *Daphnia magna*  
Duration of exposure : 28 days  
OECD Guideline 211 (*Daphnia magna* Reproduction Test)

Algae toxicity :  
ECr50 > 100 mg/l  
Species : *Raphidocelis subcapitata*  
Duration of exposure : 96 h

### 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 ALKYL DIMETHYLES, CHLORURES (CAS: 68424-85-1)

Biodegradability : Rapidly degradable.

ETHER POLYGLYCOLIQUE D'ALCOOL GRAS (CAS: 68920-66-1)

Biodegradability : Rapidly degradable.

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

Biodegradability : Rapidly degradable.

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

Biodegradability : Rapidly degradable.

HYDROCARBURES EN C11-C12, ISOALCANES, <2% EN AROMATIQUES

Biodegradability : Non-rapidly degradable.

2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

Biodegradability : Rapidly degradable.

ACETONE (CAS: 67-64-1)

Biodegradability : Rapidly degradable.



## THUNDERBOLT

### 12.3. Bioaccumulative potential

#### 12.3.1. Substances

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

Octanol/water partition coefficient : log K<sub>ow</sub> = 2.88  
OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

ETHER POLYGLYCOLIQUE D'ALCOOL GRAS (CAS: 68920-66-1)

Octanol/water partition coefficient : log K<sub>ow</sub> = 6.13

MONOPROPYLENE GLYCOL METHYL ETHER (CAS: 107-98-2)

Octanol/water partition coefficient : log K<sub>ow</sub> = 0.37

Bioaccumulation : BCF < 100

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

Octanol/water partition coefficient : log K<sub>ow</sub> = 0.05  
OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

2-METHOXY-1-METHYLETHYL ACETATE (CAS: 108-65-6)

Octanol/water partition coefficient : log K<sub>ow</sub> = 0.43

ACETONE (CAS: 67-64-1)

Octanol/water partition coefficient : log K<sub>ow</sub> = -0.24

Bioaccumulation : BCF = 3

### 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 2019 - IMDG 2018 - ICAO/IATA 2020).

### 14.1. UN number

3175

## THUNDERBOLT

### 14.2. UN proper shipping name

UN3175=SOLIDS or mixtures of solids (such as preparations and wastes) CONTAINING FLAMMABLE LIQUID, N.O.S. having a flash-point up to 60 °C  
(acetone)

### 14.3. Transport hazard class(es)

- Classification :



4.1

### 14.4. Packing group

II

### 14.5. Environmental hazards

-

### 14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	4.1	F1	II	4.1	40	1 kg	216 274 601	E2	2	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	4.1	-	II	1 kg	F-A, S-I	216 274	E2	Category B	-

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	4.1	-	II	445	15 kg	448	50 kg	A46	E2
	4.1	-	II	Y441	5 kg	-	-	A46	E2

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:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2020/1182 (ATP 15)

#### - Container information:

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

#### - Particular provisions :

No data available.

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

- less than 5 % : nonionic surfactants

- 5 % or over but less than 15 % : aliphatic hydrocarbons

- perfumes

- allergenic fragrances :

benzyl alcohol

linalool

citronellol

alpha-hexylcinnamaldehyde

### 15.2. Chemical safety assessment

No data available.

## THUNDERBOLT

### 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.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

#### Abbreviations :

DNEL : Derived No-Effect Level  
PNEC : Predicted No-Effect Concentration  
UFI : Unique Formula 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).  
GHS02 : Flame  
GHS07 : Exclamation mark  
PBT: Persistent, bioaccumulable and toxic.  
vPvB : Very persistent, very bioaccumulable.  
SVHC : Substances of very high concern.