

## **SECTION 1. Identification of the substance/mixture and of the company/undertaking**

### **1.1. Product identifier**

Product code : Tintolav Antistatex

Trades code : A70-050

Product line: Tintolav

UFI: S4E2-T0TY-R00N-F4GC

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

Anti-static spray

Sectors of use:

Industrial Manufacturing[SU3], Private households (= general public = consumers)[SU21], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against

Do not use for purposes other than those listed

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

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

Email: [info@tintolav.com](mailto:info@tintolav.com) - Sito internet: [www.tintolav.com](http://www.tintolav.com)

Email tecnico competente: [a.conedera@tintolav.com](mailto:a.conedera@tintolav.com)

National contact: Malta: Emergency Ambulance 112

Accident & Emergency Department 2545 4030

### **1.4. Emergency telephone number**

The UK National Poisons Emergency number +44 (0)870 600 6266

London: Emergency 24 hour telephone +44 (0) 207188 0100

## **SECTION 2. Hazards identification**

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

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:

GHS02, GHS07

Hazard Class and Category Code(s):

Flam. Aerosol 1, Eye Irrit. 2

Hazard statement Code(s):

H222 - Extremely flammable aerosol.

H229 - Pressurised container: May burst if heated.

H319 - Causes serious eye irritation.

Aerosol that ignites easily even at low temperatures, fire risk

If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

The repeated inhalation of vapors can cause drowsiness and giddiness.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.

The aerosol containers overheated burst and can be ejected with violence from a distance and can take place a dangerous mechanism for the fire.

**2.1.2 Additional information:**

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

**2.2. Label elements**

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):  
GHS02, GHS07 - Danger



Hazard statement Code(s):  
H222 - Extremely flammable aerosol.  
H229 - Pressurised container: May burst if heated.  
H319 - Causes serious eye irritation.

Supplemental Hazard statement Code(s):  
not applicable

**Precautionary statements:****General**

P101 - If medical advice is needed, have product container or label at hand.  
P102 - Keep out of reach of children.

**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.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

**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.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

**Storage**

P403 - Store in a well-ventilated place.  
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Content of VOC ready to use condition: 96,00 %

UFI: S4E2-T0TY-R00N-F4GC

**2.3. Other hazards**

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

No information on other hazards

---

**SECTION 3. Composition/information on ingredients**

---

### 3.1 Substances

Irrilevant

### 3.2 Mixtures

Butane contains less than 0,1 % w/w 1,3-butadiene (EINECS No 203-450-8)

Note K - The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w 1,3- butadiene (Einecs No 203-450-8), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P210-P403 shall apply.

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
ethanol	>= 35 < 50%	Flam. Liq. 2, H225 ATE oral = 7.060,000 mg/kg ATE dermal = 20.000,000 mg/kg ATE inhal = 20.000,000 mg/l/4 h	603-002-00-5	64-17-5	200-578-6	01-2119457 610-43
Butane Note: K	>= 25 < 35%	Flam. Gas 1A, H220 ATE inhal = 658,000 mg/l/4 h	601-004-00-0	106-97-8	203-448-7	01-2119474 691-32
Isobutane	>= 5 < 15%	Flam. Gas 1A, H220 ATE oral = 570.000,000 mg/kg ATE dermal = 570.000,000 mg/kg ATE inhal = 658.000,000 mg/l/4 h	601-004-00-0	75-28-5	200-857-2	01-2119485 395-27
Propane	>= 5 < 15%	Flam. Gas 1A, H220; Press. Gas, H280 ATE inhal = 410.000,000 mg/l/4 h	601-003-00-5	74-98-6	200-827-9	01-2119486 944-21
propan-2-ol	>= 5 < 10,00%	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336 ATE oral = 2.100,000 mg/kg ATE dermal = 2.100,000 mg/kg ATE inhal = 29,000 mg/l/4 h	603-117-00-0	67-63-0	200-661-7	ND
Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	>= 1 < 5%	Skin Irrit. 2, H315; Eye Irrit. 2, H319 ATE oral = 2.000,000 mg/kg ATE dermal = 2.000,000 mg/kg	ND	ND	931-216-1	ND

## SECTION 4. First aid measures

#### **4.1. Description of first aid measures**

**Inhalation:**

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

**Direct contact with skin (of the pure product):**

Take contaminated clothing Immediately off.

Wash immediately with plenty of running water and possibly with soap, the areas of the body that have, or are only suspected to have, come in contact with the product.

**Direct contact with eyes (of the pure product):**

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately

Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

**Ingestion:**

Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

#### **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**

If eye irritation persists: Get medical advice/attention.

If medical advice is needed, have product container or label at hand.

### **SECTION 5. Firefighting measures**

#### **5.1. Extinguishing media**

**Advised extinguishing agents:**

CO2 or dry powder extinguisher

**Extinguishing means to avoid:**

Direct jets of water

#### **5.2. Special hazards arising from the substance or mixture**

The aerosol containers overheated burst and can be ejected with violence from a distance and can take place a dangerous mechanism for the fire.

Manufactured under pressure in sealed metal container (test pressure 15 bar max). Cool containers with water spray trying to remove them from the fire. The aerosol containers can be overheated and burst violently ejected from a distance ( protect the head using a safety helmet).

#### **5.3. Advice for firefighters**

Use protection for the breathing apparatus

Safety helmet and full protective suit.

The spray water can be used to protect the people involved in the extinction

You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

### **SECTION 6. Accidental release measures**

---

### **6.1. Personal precautions, protective equipment and emergency procedures**

#### **6.1.1 For non-emergency personnel:**

Leave the area surrounding the spill or release. Do not smoke

Leave the surrounding area recalling that any overheating could project the cylinder at a considerable distance.

Wear gloves and protective clothing

#### **6.1.2 For emergency responders:**

Given the tightness of aerosol, it is unlikely that the spillage may occur.

However if some container is damaged likely to cause a loss, insulate the tank in question by bringing it to open air or covering it with inert material and fuel (eg sand, earth, vermiculite) and having the care to avoid any point of ignition that might pose a serious risk of fire.

Wear gloves and protective clothing Suitable: LaTeX, nitrile, PVC

Eliminate all unguarded flames and possible sources of ignition. No smoking.

Provision of sufficient ventilation.

Evacuate the danger area and, in case, consult an expert.

### **6.2. Environmental precautions**

Contain spill

Inform the competent authorities.

Discharge the remains in compliance with the regulations

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

#### **6.3.1 For containment:**

Rapidly recover the product, wear a mask and protective clothing

Recover the product for reuse, if possible, or the removal.

#### **6.3.2 For cleaning up:**

After wiping up, wash with water the area and materials involved

#### **6.3.3 Other information:**

None in particular.

### **6.4. Reference to other sections**

Refer to paragraphs 8 and 13 for more information

## **SECTION 7. Handling and storage**

### **7.1. Precautions for safe handling**

Avoid contact and inhalation of vapors

Wear protective gloves/protective clothing/eye protection/face protection.

Use extreme caution when handling the product. Avoid shock or friction.

Do not smoke at work

At work do not eat or drink.

Vapors are heavier than air and may spread close to the ground and form explosive mixtures with air. Prevent formation of flammable or explosive concentrations in the air.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.

Do not pierce or burn, even after the use. Do not spray on flame or incandescent objects. Use in adequately ventilated areas.

See also paragraph 8 below.

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

Keep in original container closed tightly. Do not store in open or unlabeled containers.

Keep containers upright and safe by avoiding the possibility of falls or collisions.

---

Pressurized container. Store in a ventilated place, in original packaging away from heat and sunlight.  
Always store in well ventilated areas.  
Never close the container tightly, leave a chance to vent  
Keep away from open flames, sparks and heat sources. Avoid direct sunlight exposure.

### 7.3. Specific end use(s)

Industrial Manufacturing:  
Handle with extreme caution.  
Store in a well ventilated place away from heat sources.

Private households (= general public = consumers):  
Handle with care.  
Store in ventilated place away from heat sources,  
Keep the container tightly closed.

Public domain (administration, education, entertainment, services, craftsmen):  
Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Related to contained substances:

ethanol:

Component CAS-No. Value Control parameters

Basis

Ethanol-17-64 TWA 5 ppm 1.000

1.920 mg/m<sup>3</sup>

UK. EH40 WEL-Workplace Exposure Limits

Remarks Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

Butane:

TLV (ACGIH) = 1000 ppm

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour (s).

NIOSH REL (United States, 1/2013).

TWA: 1900 mg/m 10 hour (s).

TWA: 800 ppm 10 hour (s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 1900 mg/m 8 hour (s).

TWA: 800 ppm 8 hour (s).

Butane EH40 WEL TWA 600 ppm 1.450 mg/m<sup>3</sup>

Isobutane:

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour (s).

NIOSH REL (United States, 1/2013).

TWA: 1900 mg/m 10 hour (s).

TWA: 800 ppm 10 hour (s)

Propane:

TLV: (Aliphatic hydrocarbon gases) 1000 ppm as TWA; (ACGIH 2005).

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour (s).

NIOSH REL (United States, 1/2013).

TWA: 1800 mg/m 10 hour (s).

TWA: 1000 ppm 10 hour (s).

---

OSHA PEL (United States, 6/2010).

TWA: 1800 mg/m 8 hour (s).

TWA: 1000 ppm 8 hour (s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 1800 mg/m 8 hour (s).

TWA: 1000 ppm 8 hour (s)

propan-2-ol:

TLV: TWA 200 ppm 400 ppm as STEL A4 (not classifiable as a human carcinogen); (ACGIH 2004).

MAK: 200 ppm 500 mg/m peak limitation Category: II (2); Risk group for pregnancy: C; (DFG 2004).

- Substance: ethanol

DNEL

Systemic effects Long term Workers inhalation = 950 (mg/m<sup>3</sup>)

Systemic effects Long term Workers dermal = 343 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 114 (mg/m<sup>3</sup>)

Systemic effects Long term Consumers dermal = 206 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 87 (mg/kg bw/day)

PNEC

Sweet water = 0,96 (mg/l)

sediment Sweet water = 3,6 (mg/kg/sediment)

Sea water = 0,79 (mg/l)

sediment Sea water = 2,9 (mg/kg/sediment)

STP = 580 (mg/l)

ground = 0,63 (mg/kg ground)

- Substance: propan-2-ol

DNEL

Systemic effects Long term Workers inhalation = 500 (mg/m<sup>3</sup>)

Systemic effects Long term Workers dermal = 888 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 89 (mg/m<sup>3</sup>)

Systemic effects Long term Consumers dermal = 319 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 26 (mg/kg bw/day)

PNEC

Sweet water = 140,9 (mg/l)

sediment Sweet water = 552 (mg/kg/sediment)

Sea water = 140,9 (mg/l)

sediment Sea water = 552 (mg/kg/sediment)

STP = 2251 (mg/l)

ground = 28 (mg/kg ground)

- Substance: Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized

DNEL

Systemic effects Long term Workers inhalation = 44 (mg/m<sup>3</sup>)

Systemic effects Long term Workers dermal = 312,5 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 13 (mg/m<sup>3</sup>)

Systemic effects Long term Consumers dermal = 187,5 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 7,5 (mg/kg bw/day)

PNEC

Sweet water = 0,00191 (mg/l)

sediment Sweet water = 0,58 (mg/kg/sediment)

Sea water = 0,000191 (mg/l)

STP = 2,96 (mg/l)

ground = 0,115 (mg/kg ground)

---

**8.2. Exposure controls**

Appropriate engineering controls:  
Industrial Manufacturing:  
No specific monitoring foreseen

Private households (= general public = consumers):  
No specific checks planned

Public domain (administration, education, entertainment, services, craftsmen):  
No specific monitoring foreseen

Individual protection measures:

(a) Eye / face protection

When handling the pure product use safety glasses (spectacles cage) (EN 166).

(b) Skin protection

(i) Hand protection

Manipulate with gloves. The gloves should be checked before being used. Use a technique suitable for the removal of gloves (without touching the outside of the glove) to avoid skin contact with this product dispose of contaminated gloves after use in accordance with the legislation and good laboratory practices. Wash and dry your hands.  
Selected protective gloves shall comply with the requirements of EU Directive 89/686/EEC and EN 374 standards arising therefrom.

Full contact

Material: nitrile rubber

minimum thickness: 0.11 mm

permeation time: 480 min

(ii) Other

When handling the pure product wear full protective skin clothing.  
Better is to use cotton antistatic clothing

(c) Respiratory protection

Work in a sufficiently ventilated to avoid inhaling the product.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good working practices to avoid pollution into the environment.

**SECTION 9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical and chemical properties	Value	Determination method
Physical state	Aerosol	
Colour	colorless liquid under pressure	
Odour	Characteristic	
Odour threshold	not determined	



Physical and chemical properties	Value	Determination method
Melting point/freezing point	< -100 °C	
Boiling point or initial boiling point and boiling range	< 35 °C	
Flammability	flammable	
Lower and upper explosion limit	not determined	
Flash point	< - 80 °C	ASTM D92
Auto-ignition temperature	400 °C	
Decomposition temperature	not determined	
pH	4-5 (@ 1% in H <sub>2</sub> O)	
Kinematic viscosity	not determined	
Solubility	irrelevant	
Water solubility	irrelevant	
Partition coefficient n-octanol/water (log value)	not determined	
Vapour pressure	irrelevant	
Density and/or relative density	0.65 Kg/l	
Relative vapour density	> 2 (gas)	
Particle characteristics	irrelevant	

### 9.2. Other information

Content of VOC ready to use condition: 96,00 %

#### 9.2.1 Information with regard to physical hazard classes

##### a) Explosives

i) sensitivity to shock  
Irrelevant

ii) effect of heating under confinement  
Irrelevant

iii) effect of ignition under confinement  
Irrelevant

iv) sensitivity to impact  
Irrelevant

v) sensitivity to friction  
Irrelevant

vi) thermal stability  
Irrelevant

vii) package  
Irrelevant

##### b) Flammable gases

i) Tci / explosion limits  
Irrelevant

ii) fundamental burning velocity  
Irrelevant

c) Aerosols  
Irrelevant

d) Oxidising gases  
Irrelevant

e) Gases under pressure  
Irrelevant

f) Flammable liquids  
Irrelevant

g) Flammable solids

i) burning rate, or burning time as regards metal powders  
Irrelevant

ii) statement on whether the wetted zone has been passed  
Irrelevant

h) Self-reactive substances and mixtures

i) decomposition temperature  
Irrelevant

ii) detonation properties  
Irrelevant

iii) deflagration properties  
Irrelevant

iv) effect of heating under confinement  
Irrelevant

v) explosive power, if applicable  
Irrelevant

i) Pyrophoric liquids  
Irrelevant

j) Pyrophoric solids

i) statement on whether spontaneous ignition occurs when poured or within five minutes thereafter, as regards solids in powder form  
Irrelevant

ii) statement on whether pyrophoric properties could change over time  
Irrelevant

k) Self-heating substances and mixtures

i) statement on whether spontaneous ignition occurs and the maximum temperature rise obtained  
Irrelevant

ii) results of screening tests referred to in section 2.11.4.2 of Annex I to Regulation (EC) No 1272/2008, if relevant

---

---

and available

Irrilevant

l) Substances and mixtures, which emit flammable gases in contact with water. The following information may be provided

i) identity of the emitted gas, if known

Irrilevant

ii) statement on whether the emitted gas ignites spontaneously

Irrilevant

iii) gas evolution rate

Irrilevant

m) Oxidising liquids

Irrilevant

n) Oxidizing solids

Irrilevant

o) Organic peroxides

i) decomposition temperature

Irrilevant

ii) detonation properties

Irrilevant

iii) deflagration properties

Irrilevant

iv) effect of heating under confinement

Irrilevant

v) explosive power

Irrilevant

p) Corrosive to metals

i) metals that are corroded by the substance or mixture

Irrilevant

ii) corrosion rate and statement on whether it refers to steel or aluminium

Irrilevant

iii) reference to other sections of the safety data sheet with regard to compatible or incompatible materials

Irrilevant

q) Desensitised explosives

i) desensitising agent used

Irrilevant

ii) exothermic decomposition energy

Irrilevant

iii) corrected burning rate (Ac)

Irrilevant

---

- iv) explosive properties of the desensitised explosive in that state  
Irrilevant

#### **9.2.2 Other safety characteristics**

- a) mechanical sensitivity  
Irrilevant
- b) self-accelerating polymerisation temperature  
Irrilevant
- c) formation of explosible dust/air mixtures  
Irrilevant
- d) acid/alkaline reserve  
Irrilevant
- e) evaporation rate  
Irrilevant
- f) miscibility  
Irrilevant
- g) conductivity  
Irrilevant
- h) corrosiveness  
Irrilevant
- i) gas group  
Irrilevant
- j) redox potential  
Irrilevant
- k) radical formation potential  
Irrilevant
- l) photocatalytic properties  
Irrilevant

## **SECTION 10. Stability and reactivity**

### **10.1. Reactivity**

No reactivity hazards

### **10.2. Chemical stability**

No hazardous reaction when handled and stored according to provisions.

---

### 10.3. Possibility of hazardous reactions

There are no hazardous reactions

### 10.4. Conditions to avoid

Avoid heating the product, it could explode.

Avoid contact with combustible materials. The product could catch fire.

Avoid heat, open flames, sparks or hot surfaces.

The aerosol product is stable for a period exceeding 36 months and in normal storage conditions can not take place dangerous reactions as the container is almost hermetically sealed.

To avoid that the metal container can deteriorate, keep away from acidic or basic products. Attention to the heat as temperatures exceeding 50 ° C has increased pressure inside the container that gets to deformation of the cylinder until the outbreak.

### 10.5. Incompatible materials

It can generate inflammable gases to contact with elementary metals, nitrides, strong reducing agents.

It can generate toxic gases to contact with oxidants mineral acids, organic peroxides, organic water peroxides.

It can ignite in contact with oxidants mineral acids, organic nitrides, peroxides and water peroxides, strong oxidants agents.

### 10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

## SECTION 11. Toxicological information

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

ATE(mix) oral = ∞

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: ethanol: LD50 Oral-rat-7.060 mg/kg

Remarks: Lungs, Thorax, or Respiration: Other changes.

LC50 Inhalation-rat-10:0-20000 ppm

(b) skin corrosion/irritation: ethanol: Skin-rabbit

Result: Irritating to skin. -12:0 am

(c) serious eye damage/irritation: If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

ethanol: Eyes-rabbit

Result: Mild eye irritation-12:0 am

(Draize Test)

(d) respiratory or skin sensitisation: based on available data, the classification criteria are not met.

(e) germ cell mutagenicity: based on available data, the classification criteria are not met.

(f) carcinogenicity: based on available data, the classification criteria are not met.

(g) reproductive toxicity: ethanol: Reproductive toxicity-Human-female-Oral

Effects on Newborn: Apgar score (human only). Effects on Newborn: Other measures or neonatal effects.

Effects on Newborn: Drug dependence.

(h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.

(i) specific target organ toxicity (STOT) repeated exposure based on available data, the classification criteria are not met.

(j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:

ethanol:

ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes and ingestion.

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C.

Effects of short-term exposure: the substance is irritating to the eyes. Inhalation of high vapour can cause irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system effects of

REPEATED EXPOSURE or long term: the liquid degreasing the skin features. The substance may have an effect on the high central nervous system respiratory tract, causing irritation, headaches, fatigue and lack of concentration. See Notes.

ACUTE HAZARDS/Symptoms INHALATION Cough. Headaches. Fatigue. Drowsiness.

CUTE CUTE.

EYE Redness. Pain. Burning.

SWALLOWED burning sensation. Headaches. Confusion. Vertigo. State of unconsciousness.

N O T and consumption of ethanol during pregnancy can have adverse effects on the unborn child. Chronic ethanol ingestion can cause cirrhosis of the liver.

LD50 (rat) Oral (mg/kg body weight) = 7060

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 20000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 20000

Butane:

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 658

Isobutane:

LD50 (rat) Oral (mg/kg body weight) = 570000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 570000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 658000

Propane:

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 410000

propan-2-ol:

ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes.

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance at 20 C; However, for spraying or scattering, much more quickly.

Effects of short-term exposure: the substance is irritating to the eyes and the respiratory tract the substance may cause effects on the central nervous system, causing depression. Much greater exposure to the OEL may lead to unconsciousness.

Effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features.

ACUTE HAZARDS/Symptoms INHALATION Cough. Vertigo. Drowsiness. Headaches. Sore throat. See If Swallowed.

CUTE CUTE.

EYE Redness.

INGESTION abdominal pain. Difficulty in breathing. Nausea. State of unconsciousness. Vomiting. (Further see inhalation).

N O T and use of alcoholic beverages enhances the harmful effect.

LD50 (rat) Oral (mg/kg body weight) = 2100

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2100

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 29

Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:

LD50 (rat) Oral (mg/kg body weight) = 2000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

### **11.2. Information on other hazards**

No data available.

#### **11.2.1. Endocrine disrupting properties**

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

## **SECTION 12. Ecological information**

### **12.1. Toxicity**

Related to contained substances:

ethanol:

C(E)L50 (mg/l) = 11200

Butane:

C(E)L50 (mg/l) = 7,71

Isobutane:

C(E)L50 (mg/l) = 7,71

Propane:

C(E)L50 (mg/l) = 7,71

propan-2-ol:

The less dense water product and completely miscible at 20 C.

Is lost by evaporation within one day. Large volumes can penetrate into the soil and contaminate groundwater.

C(E)L50 (mg/l) = 1000 1

1

Fatty acids, C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:

fish, LC50: 1.91 mg / l (OECD 203 (96h) read-across)

daphnia, EC50: 2.23 mg / l (EU Method C.2 (48h) read-across)

alga, CI50: 2.14 mg / l (OECD 201 (72h) read-across)

seaweed, NOEC: 1.48 mg / l (OECD 201)

C(E)L50 (mg/l) = 1,48 1

1

Use according to good working practices to avoid pollution into the environment.

### **12.2. Persistence and degradability**

No data available.

### **12.3. Bioaccumulative potential**

No data available.

### **12.4. Mobility in soil**

No data available.

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

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

**12.6. Endocrine disrupting properties**

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

**12.7. Other adverse effects**

No adverse effects

**SECTION 13. Disposal considerations****13.1. Waste treatment methods**

The waste must be disposed of in compliance with the regulations in force delivering empty containers for final disposal and equipped to safely handle pressurized containers containing flammable liquids and gas waste. The empty container heated to temperatures exceeding 70 ° C can burst.

Recover if possible. Operate according to local or national regulations

**SECTION 14. Transport information****14.1. UN number or ID number**

ADR/RID/IMDG/ICAO-IATA: 1950

ADR exemption because compliance with the following characteristics:

Combination packagings: per inner packaging 1 L per package 30 kg

Inner packagings placed in shrink-wrapped or stretch-wrapped trays: per inner packaging 1 L per package 20 kg

**14.2. UN proper shipping name**

ADR/RID/IMDG: AEROSOL infiammabili

ADR/RID/IMDG: AEROSOL flammable

ICAO-IATA: AEROSOL flammable

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

ADR/RID/IMDG/ICAO-IATA: Class : 2

ADR/RID/IMDG/ICAO-IATA: Label : 2.1 + Limited quantities

ADR: Tunnel restriction code : D

ADR/RID/IMDG/ICAO-IATA: Limited quantities : 1 L

IMDG - EmS : F-D, S-U

**14.4. Packing group**

ADR/RID/IMDG/ICAO-IATA: --

**14.5. Environmental hazards**

ADR/RID/ICAO-IATA: Product is not environmentally hazardous

IMDG: Marine polluting agent : Not



#### **14.6. Special precautions for user**

No data available.

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

It is not intended to carry bulk

### **SECTION 15. Regulatory information**

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

Seveso category:

P3a - FLAMMABLE AEROSOLS

REGULATION (EU) No 1357/2014 - waste:

HP3 - Flammable

Substances in the Candidate List (REACH Article 59)

Based on available data, no SVHC substances are present

#### **15.2. Chemical safety assessment**

The supplier has made an assessment of chemical safety

### **SECTION 16. Other information**

#### **16.1. Other information**

Points modified compared to previous release: 2.1. Classification of the substance or mixture, 2.2. Label elements, 2.3. Other hazards, 3.2 Mixtures, 7.2. Conditions for safe storage, including any incompatibilities, 8.1. Control parameters, 9.2. Other information, 10.4. Conditions to avoid, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 11.2. Information on other hazards, 12.1. Toxicity, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties, 14.1. UN number or ID number, 14.3. Transport hazard class(es), 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of the hazard statements exposed to point 3

H225 = Highly flammable liquid and vapour.

H220 = Extremely flammable gas.

H280 = Contains gas under pressure; may explode if heated.

H319 = Causes serious eye irritation.

H336 = May cause drowsiness or dizziness.

H315 = Causes skin irritation.

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

Classification according to Regulation (EC) Nr. 1272/2008

H222 - Extremely flammable aerosol. Classification procedure: On basis of test data

H229 - Pressurised container: May burst if heated. Classification procedure: On basis of test data

H319 - Causes serious eye irritation. Classification procedure: Calculation method

Main normative references:

Directive 1999/45/EC

Directive 2001/60/EC

Regulation 1272/2008/EC

Regulation 2010/453/EC

\*\* The information contained herein is based on our knowledge at the date above.

Related solely to the product and do not constitute a guarantee of a particular quality.

It is the duty of the user to ensure that these are appropriate and complete information regarding the specific use intended.

This data sheet cancels and replaces any previous edition.

---