


## Penosil EasySpray

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

- 1.1 Product identifier:** Penosil EasySpray
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Thermal insulation  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
KRIMELTE OÜ  
Suur-Paala 10  
13916 Tallinn - Estonia  
Phone.: +372 605 9300 - Fax: +372 605 9315  
sds@krimelte.com  
www.krimelte.com
- 1.4 Emergency telephone number:** 112

### SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**  
**CLP Regulation (EC) No 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.  
Aerosol 1: Flammable aerosols, Category 1, H222  
Aerosol 1: Pressurised container: May burst if heated., H229  
Aquatic Chronic 4: Hazardous to the aquatic environment, long-term hazard, Category 4, H413  
Lact.: Reproductive toxicity, effects on or via lactation, H362
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008:**  
Danger  
  
**Hazard statements:**  
H222 - Extremely flammable aerosol  
H229 - Pressurised container: May burst if heated  
H362 - May cause harm to breast-fed children  
H413 - May cause long lasting harmful effects to aquatic life  
**Precautionary statements:**  
P101: If medical advice is needed, have product container or label at hand  
P102: Keep out of reach of children  
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  
P271: Use only outdoors or in a well-ventilated area  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F  
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment  
**Substances that contribute to the classification**  
Alkanes, C14-17, chloro
- 2.3 Other hazards:**  
Product contains PBT/vPvB substances: Octamethylcyclotetrasiloxane

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\*

- 3.1 Substance:**  
Non-applicable
- 3.2 Mixture:**






\*\* Changes with regards to the previous version

## Penosil EasySpray

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\* (continued)

**Chemical description:** Mixture composed of organic substances**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 75-28-5 EC: 200-857-2 Index: 601-004-00-0 REACH01-2119485395-27- : XXXX	Isobutane <sup>1</sup>  ATP CLP00		10 - <20 %
	Regulation 1272/2008	Flam. Gas 1: H220; Press. Gas: H280 - Danger	
CAS: 115-10-6 EC: 204-065-8 Index: 603-019-00-8 REACH01-2119472128-37- : XXXX	Dimethyl ether <sup>1</sup>  ATP CLP00		5 - <10 %
	Regulation 1272/2008	Flam. Gas 1: H220; Press. Gas: H280 - Danger	
CAS: 74-98-6 EC: 200-827-9 Index: 601-003-00-5 REACH01-2119486944-21- : XXXX	Propane <sup>1</sup>  ATP CLP00		5 - <10 %
	Regulation 1272/2008	Flam. Gas 1: H220; Press. Gas: H280 - Danger	
CAS: 85535-85-9 EC: 287-477-0 Index: 602-095-00-X REACH01-2119519269-33- : XXXX	Alkanes, C14-17, chloro <sup>2</sup>  ATP ATP01		2.5 - <5 %
	Regulation 1272/2008	Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Lact.: H362; EUH066 - Warning	
CAS: Non-applicable EC: 911-815-4 Index: Non-applicable REACH01-2119486772-26- : XXXX	TCPP_Tris(2-chloro-1-methylethyl) phosphate_ multiconstituent substance <sup>2</sup>  Self-classified		2.5 - <5 %
	Regulation 1272/2008	Acute Tox. 4: H302 - Warning	

<sup>1</sup> Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830<sup>2</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 8, 11, 12, 15 and 16.

\*\* Changes with regards to the previous version

## SECTION 4: FIRST AID MEASURES

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

## SECTION 5: FIREFIGHTING MEASURES

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## Penosil EasySpray

### SECTION 5: FIREFIGHTING MEASURES (continued)

#### 5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

#### 5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

#### 5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

#### Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

#### 6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

#### 6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

#### 6.4 Reference to other sections:

See sections 8 and 13.

### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling:

##### A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

##### B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

##### C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

##### D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

#### 7.2 Conditions for safe storage, including any incompatibilities:

##### A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

##### B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

#### 7.3 Specific end use(s):

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## Penosil EasySpray

### SECTION 7: HANDLING AND STORAGE (continued)

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

Identification		Environmental limits		
Dimethyl ether CAS: 115-10-6 EC: 204-065-8		IOELV (8h)	1000 ppm	1920 mg/m <sup>3</sup>
		IOELV (STEL)		

#### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1894 mg/m <sup>3</sup>	Non-applicable
Alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	47,9 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	6,7 mg/m <sup>3</sup>	Non-applicable
TCPP_Tris(2-chloro-1-methylethyl) phosphate_ multiconstituent substance CAS: Non-applicable EC: 911-815-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	8 mg/kg	Non-applicable	2,08 mg/kg	Non-applicable
	Inhalation	22,4 mg/m <sup>3</sup>	Non-applicable	5,82 mg/m <sup>3</sup>	Non-applicable

#### DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	471 mg/m <sup>3</sup>	Non-applicable
Alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0	Oral	Non-applicable	Non-applicable	0,58 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	28,75 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2 mg/m <sup>3</sup>	Non-applicable
TCPP_Tris(2-chloro-1-methylethyl) phosphate_ multiconstituent substance CAS: Non-applicable EC: 911-815-4	Oral	Non-applicable	Non-applicable	0,52 mg/kg	Non-applicable
	Dermal	4 mg/kg	Non-applicable	1,04 mg/kg	Non-applicable
	Inhalation	11,2 mg/m <sup>3</sup>	Non-applicable	1,46 mg/m <sup>3</sup>	Non-applicable

#### PNEC:

Identification					
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	STP	160 mg/L	Fresh water	0,155 mg/L	
	Soil	0,045 mg/kg	Marine water	0,016 mg/L	
	Intermittent	1,549 mg/L	Sediment (Fresh water)	0,681 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0,069 mg/kg	
Alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0	STP	80 mg/L	Fresh water	0,001 mg/L	
	Soil	11,9 mg/kg	Marine water	0,0002 mg/L	
	Intermittent	Non-applicable	Sediment (Fresh water)	13 mg/kg	
	Oral	10 g/kg	Sediment (Marine water)	2,6 mg/kg	
TCPP_Tris(2-chloro-1-methylethyl) phosphate_ multiconstituent substance CAS: Non-applicable EC: 911-815-4	STP	7,84 mg/L	Fresh water	0,64 mg/L	
	Soil	1,7 mg/kg	Marine water	0,064 mg/L	
	Intermittent	0,51 mg/L	Sediment (Fresh water)	13,4 mg/kg	
	Oral	11,6 g/kg	Sediment (Marine water)	1,34 mg/kg	

#### 8.2 Exposure controls:

A.- General security and hygiene measures in the work place

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## Penosil EasySpray

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)



As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

#### B.- Respiratory protection



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Compulsory use of face mask	Filter mask for particles	 CAT III	EN 149:2001+A1:2009	Replace when an increase in resistance to breathing is observed.

#### C.- Specific protection for the hands





Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks	 CAT I		Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420 and EN 374.

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"



#### D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	 CAT II	EN 166:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

#### E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing	 CAT III	EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2001 EN ISO 14116:2015 EN 1149-5:2008	Limited protection against flames.
 Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	 CAT III	EN 13287:2008 EN ISO 20345:2011	Replace boots at any sign of deterioration.

#### F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

#### Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

#### Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	31,17 % weight
V.O.C. density at 20 °C:	271,2 kg/m³ (271,2 g/L)
Average carbon number:	3,07
Average molecular weight:	79,07 g/mol

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## Penosil EasySpray

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

##### Appearance:

Physical state at 20 °C:	Aerosol
Appearance:	Not available
Colour:	Not available
Odour:	Not available
Odour threshold:	Non-applicable *

##### Volatility:

Boiling point at atmospheric pressure:	-12 °C (Propellant)
Vapour pressure at 20 °C:	Non-applicable *
Vapour pressure at 50 °C:	Non-applicable *
Evaporation rate at 20 °C:	Non-applicable *

##### Product description:

Density at 20 °C:	870 kg/m <sup>3</sup>
Relative density at 20 °C:	Non-applicable *
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Recipient pressure:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

##### Flammability:

Flash Point:	-83 °C (Propellant)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	460 °C (Propellant)
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

##### Explosive:

Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

#### 9.2 Other information:

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity:

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## Penosil EasySpray

## SECTION 10: STABILITY AND REACTIVITY (continued)

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health.

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

**A- Ingestion (acute effect):**

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**B- Inhalation (acute effect):**

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**C- Contact with the skin and the eyes (acute effect):**

- Contact with the skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):**

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.  
IARC: Non-applicable
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: May cause harm to breast-fed children

**E- Sensitizing effects:**

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

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## Penosil EasySpray

## SECTION 11: TOXICOLOGICAL INFORMATION (continued)

## F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

## G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

## H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

## Other information:

Non-applicable

## Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	
TCPP_Tris(2-chloro-1-methylethyl) phosphate_multiconstituent substance CAS: Non-applicable EC: 911-815-4	LD50 oral	632 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	
Isobutane CAS: 75-28-5 EC: 200-857-2	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L (4 h)	
Propane CAS: 74-98-6 EC: 200-827-9	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L (4 h)	
Dimethyl ether CAS: 115-10-6 EC: 204-065-8	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	308,5 mg/L (4 h)	Rat

## SECTION 12: ECOLOGICAL INFORMATION

## 12.1 Toxicity:

## Product-specific aquatic toxicity:

Acute toxicity		Species	Genus
EC50	1000 mg/L (48 h)	Daphnia magna	Crustacean
EC50	1000 mg/L (72 h)	Desmodesmus subspicatus	Algae

## Substance-specific aquatic toxicity:

Identification	Acute toxicity		Species	Genus
Alkanes, C14-17, chloro CAS: 85535-85-9 EC: 287-477-0	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae

## 12.2 Persistence and degradability:

Not available

## 12.3 Bioaccumulative potential:

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## Penosil EasySpray

## SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Bioaccumulation potential	
Isobutane	BCF	27
CAS: 75-28-5	Pow Log	2.76
EC: 200-857-2	Potential	Low
Propane	BCF	13
CAS: 74-98-6	Pow Log	2.86
EC: 200-827-9	Potential	Low

## 12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Isobutane	Koc	35	Henry	120576,75 Pa·m <sup>3</sup> /mol
CAS: 75-28-5	Conclusion	Very High	Dry soil	Yes
EC: 200-857-2	Surface tension	9,84E-3 N/m (25 °C)	Moist soil	Yes
Dimethyl ether	Koc	Non-applicable	Henry	Non-applicable
CAS: 115-10-6	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 204-065-8	Surface tension	1,136E-2 N/m (25 °C)	Moist soil	Non-applicable
Propane	Koc	460	Henry	71636,78 Pa·m <sup>3</sup> /mol
CAS: 74-98-6	Conclusion	Moderate	Dry soil	Yes
EC: 200-827-9	Surface tension	7,02E-3 N/m (25 °C)	Moist soil	Yes

## 12.5 Results of PBT and vPvB assessment:

Product contains PBT/vPvB substances: Octamethylcyclotetrasiloxane

## 12.6 Other adverse effects:

Not described

## SECTION 13: DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 04*	gases in pressure containers (including halons) containing hazardous substances	Dangerous

## Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP14 Ecotoxic

## Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

## Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

## SECTION 14: TRANSPORT INFORMATION

## Transport of dangerous goods by land:

With regard to ADR 2017 and RID 2017:

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## Penosil EasySpray

### SECTION 14: TRANSPORT INFORMATION (continued)



- |   |                     |
|---|---------------------|
| <b>14.1 UN number:</b>  | UN1950              |
| <b>14.2 UN proper shipping name:</b>  | AEROSOLS, flammable |
| <b>14.3 Transport hazard class(es):</b>   | 2                   |
| Labels:   | 2.1                 |
| <b>14.4 Packing group:</b>  | N/A                 |
| <b>14.5 Environmental hazards:</b>  | No                  |
| <b>14.6 Special precautions for user</b>  |                     |
| Special regulations:  | 190, 327, 344, 625  |
| Tunnel restriction code:  | D                   |
| Physico-Chemical properties:  | see section 9       |
| Limited quantities:   | 1 L                 |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable      |

#### Transport of dangerous goods by sea:

With regard to IMDG 38-16:



- |   |                             |
|---|-----------------------------|
| <b>14.1 UN number:</b>  | UN1950                      |
| <b>14.2 UN proper shipping name:</b>  | AEROSOLS, flammable         |
| <b>14.3 Transport hazard class(es):</b>   | 2                           |
| Labels:   | 2.1                         |
| <b>14.4 Packing group:</b>  | N/A                         |
| <b>14.5 Environmental hazards:</b>  | No                          |
| <b>14.6 Special precautions for user</b>  |                             |
| Special regulations:  | 63, 959, 190, 277, 327, 344 |
| EmS Codes:  | F-D, S-U                    |
| Physico-Chemical properties:  | see section 9               |
| Limited quantities:   | 1 L                         |
| Segregation group:  | Non-applicable              |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable              |

#### Transport of dangerous goods by air:

With regard to IATA/ICAO 2018:



- |   |                     |
|---|---------------------|
| <b>14.1 UN number:</b>  | UN1950              |
| <b>14.2 UN proper shipping name:</b>  | AEROSOLS, flammable |
| <b>14.3 Transport hazard class(es):</b>   | 2                   |
| Labels:   | 2.1                 |
| <b>14.4 Packing group:</b>  | N/A                 |
| <b>14.5 Environmental hazards:</b>  | No                  |
| <b>14.6 Special precautions for user</b>  |                     |
| Physico-Chemical properties:  | see section 9       |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable      |

### SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**Seveso III:**

- CONTINUED ON NEXT PAGE -

## Penosil EasySpray

## SECTION 15: REGULATORY INFORMATION (continued)

Section	Description	Lower-tier requirements	Upper-tier requirements
P3a		150	500

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....)**

:

Contains Octamethylcyclotetrasiloxane. 1. | Shall not be placed on the market in wash-off cosmetic products in a concentration equal to or greater than 0,1 % by weight of either substance, after 31 January 2020. | 2. | For the purposes of this entry, "wash-off cosmetic products" means cosmetic products as defined in Article 2(1)(a) of Regulation (EC) No 1223/2009 that, under normal conditions of use, are washed off with water after application.'

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The product could be affected by sectorial legislation

Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers

Commission Directive 94/1/EC of 6 January 1994 adapting some technicalities of Council Directive 75/324/EEC on the approximation of the laws of the relating Member States to aerosol dispensers

Commission Directive 2008/47/EC of 8 April 2008 amending, for the purposes of adapting to technical progress, Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers

Commission Directive 2013/10/EU of 19 March 2013 amending Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

COMMISSION DIRECTIVE (EU) 2016/2037 of 21 November 2016 amending Council Directive 75/324/EEC as regards the maximum allowable pressure of aerosol dispensers and to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

## SECTION 16: OTHER INFORMATION

**Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

**Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3):

- Removed substances  
2,2'-dimorpholinyl-diethyl ether (6425-39-4)

**Texts of the legislative phrases mentioned in section 2:**

H222: Extremely flammable aerosol  
H362: May cause harm to breast-fed children  
H413: May cause long lasting harmful effects to aquatic life  
H229: Pressurised container: May burst if heated

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**

Acute Tox. 4: H302 - Harmful if swallowed  
Aquatic Acute 1: H400 - Very toxic to aquatic life  
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects  
Flam. Gas 1: H220 - Extremely flammable gas  
Lact.: H362 - May cause harm to breast-fed children  
Press. Gas: H280 - Contains gas under pressure, may explode if heated

**Advice related to training:**

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

- CONTINUED ON NEXT PAGE -

## Penosil EasySpray

### SECTION 16: OTHER INFORMATION (continued)

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5-day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
Log-POW: Octanol-water partition coefficient  
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -