

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

### 1.1. Product identifier

<b>Trade name or designation of the mixture</b>	MEFISTO SHOCK
<b>Registration number</b>	-
<b>Synonyms</b>	None.
<b>Issue date</b>	03-September-2014
<b>Version number</b>	02
<b>Revision date</b>	05-October-2014
<b>Supersedes date</b>	05-October-2014

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

<b>Identified uses</b>	BIOCIDAL PRODUCT - TP3:Veterinary hygien disinfectant TP18: insecticide - Only for professional use.
<b>Uses advised against</b>	None known.

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

#### Manufacturer

<b>Company name</b>	Biolink Limited
<b>Address</b>	Halifax Way, Pocklington IND.EST, Pocklington York, YO42 1R
<b>Telephone</b>	+44(0) 1759 303444

**e-mail** info@biolinklimited.co.uk

**1.4. Emergency telephone number** +44 (0) 1280 738605 (office hours only)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Directive 67/548/EEC or 1999/45/EC as amended

**Classification** C;R34, Xn;R20/22, R42/43, N;R50/53

The full text for all R-phrases is displayed in section 16.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Health hazards

Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Acute toxicity, inhalation	Category 4	H332 - Harmful if inhaled.
Skin corrosion/irritation	Category 1B	H314 - Causes severe skin burns and eye damage.
Respiratory sensitisation	Category 1	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation	Category 1A	H317 - May cause an allergic skin reaction.
Specific target organ toxicity - single exposure	Category 3 respiratory tract irritation	H335 - May cause respiratory irritation.

##### Environmental hazards

Hazardous to the aquatic environment, acute aquatic hazard	Category 1	
Hazardous to the aquatic environment, long-term aquatic hazard	Category 1	H410 - Very toxic to aquatic life with long lasting effects.

#### Hazard summary

**Physical hazards** Not classified for physical hazards.

<b>Health hazards</b>	Harmful by inhalation and if swallowed. Causes burns. May cause sensitisation by inhalation and skin contact. Occupational exposure to the substance or mixture may cause adverse health effects.
<b>Environmental hazards</b>	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Specific hazards</b>	Prolonged exposure may cause chronic effects.
<b>Main symptoms</b>	Burning pain and severe corrosive skin damage. Dermatitis. Rash. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Difficulty in breathing. May cause an allergic skin reaction. Prolonged exposure may cause chronic effects.

## 2.2. Label elements

### Label according to Regulation (EC) No. 1272/2008 as amended

**Contains:** Alkyl(C12-16)dimethylbenzylammonium chloride, Deltamethrin, Glutaraldehyde, Hydrocarbons, C10, aromatics, <1% naphthalene, Limonene

#### Hazard pictograms



#### Signal word

Danger

#### Hazard statements

H302	Harmful if swallowed.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.

#### Precautionary statements

##### Prevention

P260	Do not breathe mist or vapour.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.

##### Response

P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see this label).
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

##### Storage

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

##### Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
------	---

**Supplemental label information** EUH071 - Corrosive to the respiratory tract.

## 2.3. Other hazards

None known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

## General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Alkyl(C12-16)dimethylbenzylammonium chloride	20-50	68424-85-1 270-325-2	-	-	
<b>Classification:</b>	<b>DSD:</b>	C;R34, Xn;R21/22, N;R50			
	<b>CLP:</b>	Acute Tox. 4;H302, Acute Tox. 4;H312, Skin Corr. 1B;H314, Eye Dam. 1;H318, Aquatic Acute 1;H400			
Glutaraldehyde	10 - < 20	111-30-8 203-856-5	-	605-022-00-X	
<b>Classification:</b>	<b>DSD:</b>	T;R23/25, C;R34, R42/43, N;R50			
	<b>CLP:</b>	Acute Tox. 3;H301, Skin Corr. 1B;H314, Skin Sens. 1A;H317, Acute Tox. 2;H330, Resp. Sens. 1;H334, STOT SE 3;H335, Aquatic Acute 1;H400, Aquatic Chronic 2;H411			
Hydrocarbons, C10, aromatics, <1% naphthalene	<10	Not available 918-811-1	-	-	
<b>Classification:</b>	<b>DSD:</b>	Xn;R65, R66-67, N;R51/53			
	<b>CLP:</b>	Asp. Tox. 1;H304, Acute Tox. 2;H330, STOT SE 3;H336, Aquatic Chronic 2;H411			
Deltamethrin	< 1	52918-63-5 258-256-6	-	607-319-00-X	M=1000000
<b>Classification:</b>	<b>DSD:</b>	T;R23/25, N;R50/53			
	<b>CLP:</b>	Acute Tox. 3;H301, Acute Tox. 3;H311, Eye Irrit. 2;H319, Acute Tox. 3;H331, STOT SE 2;H371, Aquatic Acute 1;H400, Aquatic Chronic 1;H410			
Naphthalene	< 1	91-20-3 202-049-5	-	601-052-00-2	#
<b>Classification:</b>	<b>DSD:</b>	Carc. Cat. 3;R40, Xn;R22, N;R50-53			
	<b>CLP:</b>	Acute Tox. 4;H302, Carc. 2;H351, Aquatic Chronic 1;H410			
Limonene	< 0,2	5989-27-5 227-813-5	-	601-029-00-7	
<b>Classification:</b>	<b>DSD:</b>	R10, Xi;R38, R43, N;R50/53			C
	<b>CLP:</b>	Flam. Liq. 3;H226, Skin Irrit. 2;H315, Skin Sens. 1;H317, Aquatic Acute 1;H400, Aquatic Chronic 1;H410			

### List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

### Composition comments

The full text for all R- and H-phrases is displayed in section 16. All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## SECTION 4: First aid measures

### General information

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

### 4.1. Description of first aid measures

#### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately. If breathing is difficult, give oxygen and monitor closely. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor / physician.

<b>Skin contact</b>	Take off immediately all contaminated clothing. For minor skin contact, avoid spreading material on unaffected skin. Wash skin thoroughly with soap and water for several minutes. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.
<b>Ingestion</b>	Call a physician or poison control centre immediately. Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Burning pain and severe corrosive skin damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Difficulty in breathing. Prolonged exposure may cause chronic effects.
<b>4.3. Indication of any immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

<b>General fire hazards</b>	No unusual fire or explosion hazards noted.
<b>5.1. Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this may spread the fire.
<b>5.2. Special hazards arising from the substance or mixture</b>	Fire may produce irritating, corrosive and/or toxic gases. Carbon oxides. Hydrogen Chloride (HCl). Hydrogen cyanide. Nitrogen Oxides
<b>5.3. Advice for firefighters</b>	
<b>Special protective equipment for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Special fire fighting procedures</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

<b>6.1. Personal precautions, protective equipment and emergency procedures</b>	
<b>For non-emergency personnel</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not get in eyes, on skin, on clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.
<b>For emergency responders</b>	Keep unnecessary personnel away. Use personal protection recommended in section 8 of the SDS.
<b>6.2. Environmental precautions</b>	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
<b>6.3. Methods and material for containment and cleaning up</b>	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use.
<b>6.4. Reference to other sections</b>	For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

<b>7.1. Precautions for safe handling</b>	Do not breathe mist or vapour. Do not get in eyes, on skin, or on clothing. Persons susceptible to allergic reactions should wear gloves when applying this product. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. Wash contaminated clothing before reuse.
---	---

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

Store locked up. Store in original tightly closed container. Keep out of the reach of children. Store in a well-ventilated place. Store away from incompatible materials (see section 10 of the SDS).

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

BIOCIDAL PRODUCT - TP3:Veterinary hygien disinfectant TP18: insecticide - Only for professional use.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits****Austria. MAK List**

Components	Type	Value
Ethanol (CAS 64-17-5)	Ceiling	3800 mg/m <sup>3</sup>
		2000 ppm
	MAK	1900 mg/m <sup>3</sup>
Glutaraldehyde (CAS 111-30-8)	Ceiling	1000 ppm
		0,2 mg/m <sup>3</sup>
	MAK	0,05 ppm
Naphthalene (CAS 91-20-3)		0,2 mg/m <sup>3</sup>
		0,05 ppm
	MAK	50 mg/m <sup>3</sup>
		10 ppm

**Belgium. Exposure Limit Values.**

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1907 mg/m <sup>3</sup>
		1000 ppm
Glutaraldehyde (CAS 111-30-8)	STEL	0,21 mg/m <sup>3</sup>
		0,05 ppm
Naphthalene (CAS 91-20-3)	STEL	80 mg/m <sup>3</sup>
		15 ppm
	TWA	53 mg/m <sup>3</sup>
		10 ppm

**Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work**

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1000 mg/m <sup>3</sup>
Naphthalene (CAS 91-20-3)	STEL	75 mg/m <sup>3</sup>
	TWA	50 mg/m <sup>3</sup>

**Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09**

Components	Type	Value
Ethanol (CAS 64-17-5)	MAC	1900 mg/m <sup>3</sup>
		1000 ppm
Glutaraldehyde (CAS 111-30-8)	MAC	0,2 mg/m <sup>3</sup>
		0,05 ppm
	STEL	0,2 mg/m <sup>3</sup>
Naphthalene (CAS 91-20-3)		0,05 ppm
	MAC	50 mg/m <sup>3</sup>
		10 ppm

**Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.**

Components	Type	Value
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup>
		10 ppm

**Czech Republic. OELs. Government Decree 361**

Components	Type	Value	Form
Citric acid monohydrate (CAS 5949-29-1)	TWA	4 mg/m <sup>3</sup>	Dust.
Ethanol (CAS 64-17-5)	Ceiling	3000 mg/m <sup>3</sup>	

**Czech Republic. OELs. Government Decree 361**

Components	Type	Value	Form
Glutaraldehyde (CAS 111-30-8)	TWA	1000 mg/m <sup>3</sup>	
	Ceiling	0,4 mg/m <sup>3</sup>	
Naphthalene (CAS 91-20-3)	TWA	0,2 mg/m <sup>3</sup>	
	Ceiling	100 mg/m <sup>3</sup>	
	TWA	50 mg/m <sup>3</sup>	

**Denmark. Exposure Limit Values**

Components	Type	Value
Ethanol (CAS 64-17-5)	TLV	1900 mg/m <sup>3</sup> 1000 ppm
Glutaraldehyde (CAS 111-30-8)	Ceiling	0,8 mg/m <sup>3</sup> 0,2 ppm
Limonene (CAS 5989-27-5)	TLV	25 ppm
Naphthalene (CAS 91-20-3)	TLV	50 mg/m <sup>3</sup> 10 ppm

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup> 1000 ppm
	TWA	1000 mg/m <sup>3</sup> 500 ppm
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup> 10 ppm

**Finland. Workplace Exposure Limits**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	2500 mg/m <sup>3</sup> 1300 ppm
	TWA	1900 mg/m <sup>3</sup> 1000 ppm
Glutaraldehyde (CAS 111-30-8)	Ceiling	0,42 mg/m <sup>3</sup> 0,1 ppm
Limonene (CAS 5989-27-5)	STEL	280 mg/m <sup>3</sup> 50 ppm
	TWA	140 mg/m <sup>3</sup> 25 ppm
Naphthalene (CAS 91-20-3)	STEL	10 mg/m <sup>3</sup> 2 ppm
	TWA	5 mg/m <sup>3</sup> 1 ppm

**France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984**

Components	Type	Value
Ethanol (CAS 64-17-5)	VLE	9500 mg/m <sup>3</sup> 5000 ppm
	VME	1900 mg/m <sup>3</sup> 1000 ppm
Glutaraldehyde (CAS 111-30-8)	VLE	0,8 mg/m <sup>3</sup> 0,2 ppm
	VME	0,4 mg/m <sup>3</sup> 0,1 ppm
Naphthalene (CAS 91-20-3)	VME	50 mg/m <sup>3</sup> 10 ppm

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)**

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	960 mg/m <sup>3</sup> 500 ppm
Glutaraldehyde (CAS 111-30-8)	TWA	0,21 mg/m <sup>3</sup> 0,05 ppm
Limonene (CAS 5989-27-5)	TWA	28 mg/m <sup>3</sup> 5 ppm

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace**

Components	Type	Value	Form
Ethanol (CAS 64-17-5)	AGW	960 mg/m <sup>3</sup> 500 ppm	
Glutaraldehyde (CAS 111-30-8)	AGW	0,2 mg/m <sup>3</sup> 0,05 ppm	
Limonene (CAS 5989-27-5)	AGW	28 mg/m <sup>3</sup> 5 ppm	
Naphthalene (CAS 91-20-3)	AGW	0,5 mg/m <sup>3</sup> 0,1 ppm	Inhalable fraction. Inhalable fraction.

**Greece. OELs (Decree No. 90/1999, as amended)**

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup> 1000 ppm
Glutaraldehyde (CAS 111-30-8)	STEL	0,8 mg/m <sup>3</sup> 0,2 ppm
	TWA	0,8 mg/m <sup>3</sup> 0,2 ppm
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup> 10 ppm

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	7600 mg/m <sup>3</sup>
	TWA	1900 mg/m <sup>3</sup>
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup>

**Iceland. OELs. Regulation 154/1999 on occupational exposure limits**

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup> 1000 ppm
Glutaraldehyde (CAS 111-30-8)	STEL	0,8 mg/m <sup>3</sup> 0,2 ppm
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup> 10 ppm

**Ireland. Occupational Exposure Limits**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Glutaraldehyde (CAS 111-30-8)	STEL	0,2 mg/m <sup>3</sup> 0,05 ppm
Naphthalene (CAS 91-20-3)	STEL	75 mg/m <sup>3</sup> 15 ppm
	TWA	50 mg/m <sup>3</sup> 10 ppm

**Italy. OELs**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Glutaraldehyde (CAS 111-30-8)	Ceiling	0,05 ppm
Naphthalene (CAS 91-20-3)	TWA	50 mg/m3 10 ppm

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1000 mg/m3
Glutaraldehyde (CAS 111-30-8)	TWA	5 mg/m3
Naphthalene (CAS 91-20-3)	TWA	50 mg/m3 10 ppm

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3 1000 ppm
	TWA	1000 mg/m3 500 ppm
Glutaraldehyde (CAS 111-30-8)	Ceiling	0,8 mg/m3 0,2 ppm
Naphthalene (CAS 91-20-3)	TWA	50 mg/m3 10 ppm

**Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A**

Components	Type	Value
Naphthalene (CAS 91-20-3)	TWA	50 mg/m3 10 ppm

**Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)**

Components	Type	Value
Naphthalene (CAS 91-20-3)	TWA	50 mg/m3 10 ppm

**Netherlands. OELs (binding)**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1900 mg/m3
	TWA	260 mg/m3
Naphthalene (CAS 91-20-3)	STEL	80 mg/m3
	TWA	50 mg/m3

**Norway. Administrative Norms for Contaminants in the Workplace**

Components	Type	Value
Ethanol (CAS 64-17-5)	TLV	950 mg/m3 500 ppm
Glutaraldehyde (CAS 111-30-8)	Ceiling	0,8 mg/m3 0,2 ppm
Limonene (CAS 5989-27-5)	TLV	140 mg/m3 25 ppm
Naphthalene (CAS 91-20-3)	TLV	50 mg/m3 0,04 mg/m3 10 ppm

**Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment**

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3



**Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment**

<b>Components</b>	<b>Type</b>	<b>Value</b>
Glutaraldehyde (CAS 111-30-8)	STEL	0,6 mg/m <sup>3</sup>
	TWA	0,4 mg/m <sup>3</sup>
Naphthalene (CAS 91-20-3)	STEL	50 mg/m <sup>3</sup>
	TWA	20 mg/m <sup>3</sup>

**Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)**

<b>Components</b>	<b>Type</b>	<b>Value</b>
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup> 10 ppm

**Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)**

<b>Components</b>	<b>Type</b>	<b>Value</b>
Ethanol (CAS 64-17-5)	TWA	1000 ppm
Glutaraldehyde (CAS 111-30-8)	Ceiling	0,05 ppm
Naphthalene (CAS 91-20-3)	STEL	15 ppm
	TWA	10 ppm

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

<b>Components</b>	<b>Type</b>	<b>Value</b>
Ethanol (CAS 64-17-5)	STEL	9500 mg/m <sup>3</sup>
		5000 ppm
	TWA	1900 mg/m <sup>3</sup> 1000 ppm
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup> 9,5 ppm

**Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents**

<b>Components</b>	<b>Type</b>	<b>Value</b>
Ethanol (CAS 64-17-5)	TWA	960 mg/m <sup>3</sup> 500 ppm
		0,2 mg/m <sup>3</sup> 0,05 ppm
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup> 10 ppm

**Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents**

<b>Components</b>	<b>Type</b>	<b>Value</b>
Ethanol (CAS 64-17-5)	STEL	1920 mg/m <sup>3</sup> 1000 ppm
		0,2 mg/m <sup>3</sup> 0,05 ppm
Naphthalene (CAS 91-20-3)	STEL	80 mg/m <sup>3</sup> 15 ppm

**Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)**

<b>Components</b>	<b>Type</b>	<b>Value</b>
Ethanol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup> 1000 ppm
		0,42 mg/m <sup>3</sup> 0,1 ppm
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup> 10 ppm

**Spain. Occupational Exposure Limits**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1910 mg/m <sup>3</sup> 1000 ppm
Glutaraldehyde (CAS 111-30-8)	STEL	0,2 mg/m <sup>3</sup> 0,05 ppm
Naphthalene (CAS 91-20-3)	STEL	80 mg/m <sup>3</sup> 15 ppm
	TWA	53 mg/m <sup>3</sup> 10 ppm

**Sweden. Occupational Exposure Limit Values**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1900 mg/m <sup>3</sup> 1000 ppm
	TWA	1000 mg/m <sup>3</sup> 500 ppm
Glutaraldehyde (CAS 111-30-8)	Ceiling	0,4 mg/m <sup>3</sup> 0,1 ppm
Naphthalene (CAS 91-20-3)	STEL	80 mg/m <sup>3</sup> 15 ppm
	TWA	50 mg/m <sup>3</sup> 10 ppm

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Components	Type	Value
Ethanol (CAS 64-17-5)	STEL	1920 mg/m <sup>3</sup> 1000 ppm
	TWA	960 mg/m <sup>3</sup> 500 ppm
Glutaraldehyde (CAS 111-30-8)	STEL	0,42 mg/m <sup>3</sup> 0,1 ppm
	TWA	0,21 mg/m <sup>3</sup> 0,05 ppm
Limonene (CAS 5989-27-5)	STEL	80 mg/m <sup>3</sup> 14 ppm
	TWA	40 mg/m <sup>3</sup> 7 ppm
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup> 10 ppm

**UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value
Ethanol (CAS 64-17-5)	TWA	1920 mg/m <sup>3</sup> 1000 ppm
Glutaraldehyde (CAS 111-30-8)	STEL	0,2 mg/m <sup>3</sup> 0,05 ppm
	TWA	0,2 mg/m <sup>3</sup> 0,05 ppm

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU**

Components	Type	Value
Naphthalene (CAS 91-20-3)	TWA	50 mg/m <sup>3</sup> 10 ppm

## Biological limit values

Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2

Components	Value	Determinant	Specimen	Sampling time
Naphthalene (CAS 91-20-3)	3,77 µg/g	1-Hydroxypyrene	Creatinine in urine	*
	5,66 µg/l	1-Hydroxypyrene	Urine	*

\* - For sampling details, please see the source document.

## UK. EH40 Biological Monitoring Guidance Values (BMGVs)

Components	Value	Determinant	Specimen	Sampling time
Naphthalene (CAS 91-20-3)	4 µmol/mol	1-Hydroxypyrene	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no-effect level (DNEL)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

## 8.2. Exposure controls

**Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

## Individual protection measures, such as personal protective equipment

**General information** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** Safety glasses with side-shields.

### Skin protection

**- Hand protection** Wear appropriate chemical resistant gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

**- Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection** No specific recommendations due to the small quantities handled. Do not breathe dust/fume/gas/mist/vapors/spray. Use respiratory equipment with gas filter, type K.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

**Environmental exposure controls** Inform appropriate managerial or supervisory personnel of all environmental releases.

## SECTION 9: Physical and chemical properties

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

<b>Appearance</b>	Emulsion, oil in water.
<b>Physical state</b>	Liquid.
<b>Form</b>	Fluid. Liquid.
<b>Colour</b>	Orange
<b>Odour</b>	Agrumy
<b>Odour threshold</b>	Not available.
<b>pH</b>	3,3
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	> 150,0 °C (> 302,0 °F) (Method A,9 Regulation 440/2008)
<b>Evaporation rate</b>	Not available.

<b>Flammability (solid, gas)</b>	Not relevant.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Vapour density</b>	Not available.
<b>Relative density</b>	0,996 (20 °C (68 °F))
<b>Solubility(ies)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	35,2 mm <sup>2</sup> /s (20 °C (68 °F))
<b>Explosive properties</b>	Not available.
<b>Oxidizing properties</b>	Not oxidizing. (Oxidising properties A21 method).
<b>9.2. Other information</b>	
<b>pH in aqueous solution</b>	4,4 (1%).
<b>Surface tension</b>	estimated
<b>Thermal hazards</b>	
<b>Thermal stability</b>	No exothermic reaction between 25°C and 500°C.

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	Corrosive to metals.
<b>10.4. Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong oxidising agents. Strong acids. Strong bases. Amines. Ammonia. Aluminum and aluminum alloys. Copper compounds. Carbon steel Iron Steel.
<b>10.6. Hazardous decomposition products</b>	Decomposition products depend upon temperature, air supply and the presence of other materials.

## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	Harmful if inhaled. May cause damage to organs by inhalation. May cause damage to organs through prolonged or repeated exposure by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>Skin contact</b>	Causes severe skin burns. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Causes digestive tract burns. Harmful if swallowed.
<b>Symptoms</b>	Burning pain and severe corrosive skin damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Difficulty in breathing.

### 11.1. Information on toxicological effects

<b>Acute toxicity</b>	Harmful if inhaled. Harmful if swallowed. May cause an allergic skin reaction. May cause respiratory irritation.
-----------------------	--

<b>Components</b>	<b>Species</b>	<b>Test results</b>
Alkyl(C12-16)dimethylbenzylammonium chloride (CAS 68424-85-1)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	426 mg/kg

Components	Species	Test results
Deltamethrin (CAS 52918-63-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	0,785 mg/l, 2 Hours
<i>Oral</i>		
LD50	Rat	31 mg/kg
Glutaraldehyde (CAS 111-30-8)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Mouse	> 4500 mg/kg
	Rabbit	0,56 ml/kg, 24 Hours
		0,25 ml/kg, 24 Hours
	Rat	2,46 ml/kg, 4 Hours
<i>Inhalation</i>		
LC100	Rat	15 mg/l, 7 Hours
LC50	Rat	24 ppm, 4 Hours
		0,28 - 0,39 mg/l, 4 Hours
<i>Oral</i>		
LD50	Mouse	100 mg/kg
	Rabbit	0,5 ml/kg
	Rat	1,07 ml/kg
<i>Other</i>		
LD50	Mouse	15 mg/kg
	Rat	9,8 mg/kg
Hydrocarbons, C10, aromatics, <1% naphthalene (CAS Not available)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
<i>Inhalation</i>		
LC50	Rat	> 4688 mg/m3
<i>Oral</i>		
LD50	Rat	5210 mg/kg
Naphthalene (CAS 91-20-3)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2 g/kg
<i>Oral</i>		
LD50	Rat	490 mg/kg
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.	
<b>Irritation Corrosion - Skin</b>		
MEFISTO SHOCK (CAS Mixture)	OECD N°404. Result: Corrosive to skin.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Respiratory sensitisation</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
<b>Skin sensitisation</b>	May cause an allergic skin reaction.	
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Carcinogenicity</b>	Risk of cancer cannot be excluded with prolonged exposure.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Deltamethrin (CAS 52918-63-5)	3 Not classifiable as to carcinogenicity to humans.	
Limonene (CAS 5989-27-5)	3 Not classifiable as to carcinogenicity to humans.	
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.	

<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not classified.
<b>Mixture versus substance information</b>	No information available.
<b>Other information</b>	Not available.

## SECTION 12: Ecological information

**12.1. Toxicity** Very toxic to aquatic life with long lasting effects.

Components	Species	Test results
Deltamethrin (CAS 52918-63-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 0 mg/l, 48 hours
Fish	LC50	Indian catfish (Heteropneustes fossilis) 0,0019 mg/l, 96 hours
Naphthalene (CAS 91-20-3)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 1,09 - 3,4 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha) 0,95 - 1,62 mg/l, 96 hours

**12.2. Persistence and degradability** The product is not readily biodegradable. (OECD 301D). Inherently biodegradable: 81.2% after 28 days - OECD 302B - Zahn Wallen.

**12.3. Bioaccumulative potential** Not available.

### Partition coefficient n-octanol/water (log Kow)

Deltamethrin (CAS 52918-63-5)	6,2
Limonene (CAS 5989-27-5)	4,232

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** No data available.

**12.5. Results of PBT and vPvB assessment** Not a PBT or vPvB substance or mixture.

**12.6. Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
<b>EU waste code</b>	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

<b>14.1. UN number</b>	UN3265
<b>14.2. UN proper shipping name</b>	Corrosive liquid, acidic, organic, n.o.s. (Alkyl(C12-16)dimethylbenzylammonium chloride)
<b>14.3. Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	8

<b>Hazard No. (ADR)</b>	Not available.
<b>Tunnel restriction code</b>	Not available.
<b>14.4. Packing group</b>	II
<b>14.5. Environmental hazards</b>	Yes
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

#### RID

<b>14.1. UN number</b>	UN3265
<b>14.2. UN proper shipping name</b>	Corrosive liquid, acidic, organic, n.o.s. (Alkyl(C12-16)dimethylbenzylammonium chloride)
<b>14.3. Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	8
<b>14.4. Packing group</b>	II
<b>14.5. Environmental hazards</b>	Yes
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

#### ADN

<b>14.1. UN number</b>	UN3265
<b>14.2. UN proper shipping name</b>	Corrosive liquid, acidic, organic, n.o.s. (Alkyl(C12-16)dimethylbenzylammonium chloride)
<b>14.3. Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	8
<b>14.4. Packing group</b>	II
<b>14.5. Environmental hazards</b>	Yes
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

#### IATA

<b>14.1. UN number</b>	UN3265
<b>14.2. UN proper shipping name</b>	Corrosive liquid, acidic, organic, n.o.s. (Alkyl(C12-16)dimethylbenzylammonium chloride)
<b>14.3. Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>14.4. Packing group</b>	II
<b>14.5. Environmental hazards</b>	Yes
<b>ERG Code</b>	8L
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

<b>14.1. UN number</b>	UN3265
<b>14.2. UN proper shipping name</b>	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Alkyl(C12-16)dimethylbenzylammonium chloride)
<b>14.3. Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	-
<b>14.4. Packing group</b>	II
<b>14.5. Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	F-A, S-B
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

## SECTION 15: Regulatory information

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

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I**

Not listed.

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II**

Not listed.

**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### **Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended**

Not listed.

#### **Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Naphthalene (CAS 91-20-3)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work**

Not listed.

**Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding**

Naphthalene (CAS 91-20-3)

#### **Other EU regulations**

**Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances**

Not listed.

**Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Deltamethrin (CAS 52918-63-5)

Glutaraldehyde (CAS 111-30-8)

Limonene (CAS 5989-27-5)

Naphthalene (CAS 91-20-3)

**Directive 94/33/EC on the protection of young people at work**

Deltamethrin (CAS 52918-63-5)

Glutaraldehyde (CAS 111-30-8)

Limonene (CAS 5989-27-5)

Naphthalene (CAS 91-20-3)

#### **Other regulations**

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

#### **National regulations**

Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents.

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

No Chemical Safety Assessment has been carried out.

### **SECTION 16: Other information**

#### **List of abbreviations**

DSD: Directive 67/548/EEC.

CLP: Regulation No. 1272/2008.

PBT: Persistent, bioaccumulative and toxic.

vPvB: Very Persistent and very Bioaccumulative.

TWA: Time weighted average.

STEL: Short term exposure limit.

TLV: Threshold Limit Value.

#### **References**

ESIS (European chemical Substances Information System)

#### **Information on evaluation method leading to the classification of mixture**

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.



**Full text of any statements or R-phrases and H-statements under Sections 2 to 15**

R10 Flammable.  
R20/22 Harmful by inhalation and if swallowed.  
R21/22 Harmful in contact with skin and if swallowed.  
R22 Harmful if swallowed.  
R23/25 Toxic by inhalation and if swallowed.  
R34 Causes burns.  
R38 Irritating to skin.  
R40 Limited evidence of a carcinogenic effect.  
R42/43 May cause sensitisation by inhalation and skin contact.  
R43 May cause sensitisation by skin contact.  
R50 Very toxic to aquatic organisms.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R53 May cause long-term adverse effects in the aquatic environment.  
R65 Harmful: may cause lung damage if swallowed.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.  
H226 Flammable liquid and vapour.  
H301 Toxic if swallowed.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H311 Toxic in contact with skin.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H330 Fatal if inhaled.  
H331 Toxic if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H351 Suspected of causing cancer.  
H371 May cause damage to organs.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.

**Training information**

Follow training instructions when handling this material.

**Disclaimer**

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment. The information in the sheet was written based on the best knowledge and experience currently available.