



## SAFETY DATA SHEET

### ^ Bio Fogger

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

##### 1.1. Product identifier

Product name                      ^ Bio Fogger

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

Identified uses                      Disinfectant.

Uses advised against              For professional use only. This product is not recommended for any industrial, professional or consumer use other than the Identified uses above.

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

Supplier                              Autosmart International Ltd  
Lynn Lane  
Shenstone, nr Lichfield  
Staffordshire. WS14 0DH  
England  
www.autosmartinternational.com  
Tel: +44 (0) 1543 481616 (09:00 - 17:00)  
info@autosmartinternational.com

Contact person                      Mr. Russell Butler

##### 1.4. Emergency telephone number

Emergency telephone              Mob: +44 (0) 7808 971321 (24hrs)  
Tel: +44 (0) 1543 481616 (09:00 - 17:00)  
Fax: +44 (0) 1543 481549 (09:00 - 17:00)

If you urgently need medical help or advice but it's not a life-threatening situation, call 111 free from any phone to speak to an NHS adviser. The 24-hour NHS 111 service can give you healthcare advice or direct you to the local service that can help you best.

#### SECTION 2: Hazards identification

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

###### Classification (EC 1272/2008)

Physical hazards                      Aerosol 1 - H222, H229

Health hazards                        Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards              Not Classified

##### 2.2. Label elements

###### Hazard pictograms



**^ Bio Fogger**

<b>Signal word</b>	Danger
<b>Hazard statements</b>	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
<b>Precautionary statements</b>	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. 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.
<b>Contains</b>	ethanol 34%, propan-2-ol 25%, didecyldimethylammonium chloride 0.16%, Silver Chloride coated on Titanium Dioxide 0.0031%

**2.3. Other hazards**

This product does not contain any substances classified as PBT or vPvB.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

<b>Petroleum gases, liquefied</b>			<b>30&lt;60%</b>
CAS number: 68476-85-7	EC number: 270-704-2	REACH registration number: Exempt - Article 2(7)(b)	
Substance with a Community workplace exposure limit.			
<b>Classification</b> Flam. Gas 1 - H220 Press. Gas (Liq.) - H280			

<b>ethanol 34%</b>			<b>34%</b>
CAS number: 64-17-5	EC number: 200-578-6	REACH registration number: 01-2119457610-43-XXXX	
<b>Classification</b> Flam. Liq. 2 - H225			

<b>propan-2-ol 25%</b>			<b>25%</b>
CAS number: 67-63-0	EC number: 200-661-7	REACH registration number: 01-2119457558-25-xxxx	
Substance with a Community workplace exposure limit.			
<b>Classification</b> Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336			

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<b>methanol</b> <span style="float: right;"><b>0.7&lt;1.0%</b></span>		
CAS number: 67-56-1	EC number: 200-659-6	REACH registration number: 01-2119433307-44-xxxx
Substance with National workplace exposure limits.		
<b>Classification</b> Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370		
<b>didecyldimethylammonium chloride 0.16%</b> <span style="float: right;"><b>0.16%</b></span>		
CAS number: 7173-51-5	EC number: 230-525-2	
M factor (Acute) = 10	M factor (Chronic) = 1	
<b>Classification</b> Acute Tox. 4 - H302 Skin Corr. 1B - H314 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		
<b>Silver Chloride coated on Titanium Dioxide 0.0031%</b> <span style="float: right;"><b>0.0031%</b></span>		
CAS number: —		
M factor (Acute) = 10		
<b>Classification</b> Aquatic Acute 1 - H400		

The full text for all hazard statements is displayed in Section 16.

#### SECTION 4: First aid measures

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

<b>General information</b>	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
<b>Inhalation</b>	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
<b>Skin contact</b>	Rinse with water.

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<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

### **4.2. Most important symptoms and effects, both acute and delayed**

<b>General information</b>	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.
<b>Ingestion</b>	Due to the physical nature of this product, it is unlikely that ingestion will occur.
<b>Skin contact</b>	Repeated exposure may cause skin dryness or cracking.
<b>Eye contact</b>	Irritating to eyes.

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

<b>Notes for the doctor</b>	Treat symptomatically.
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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

<b>Suitable extinguishing media</b>	The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

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

<b>Specific hazards</b>	Containers can burst violently or explode when heated, due to excessive pressure build-up. Bursting aerosol containers may be propelled from a fire at high speed. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Vapours may form explosive mixtures with air.
<b>Hazardous combustion products</b>	Hydrocarbons. Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Alcohols.

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

<b>Protective actions during firefighting</b>	Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

## **SECTION 6: Accidental release measures**

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

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### Personal precautions

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Evacuate area. Risk of explosion. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.

### 6.2. Environmental precautions

#### Environmental precautions

Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

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

#### Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Approach the spillage from upwind. Under normal conditions of handling and storage, spillages from aerosol containers are unlikely. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### 6.4. Reference to other sections

#### Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Usage precautions

Keep out of the reach of children. Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Avoid exposing aerosol containers to high temperatures or direct sunlight. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapours and spray/mists.

#### Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

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

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### Storage precautions

Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep away from oxidising materials, heat and flames. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C/122°F. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

### Storage class

Chemical storage.

### 7.3. Specific end use(s)

#### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Petroleum gases, liquefied

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1750 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 1250 ppm 2180 mg/m<sup>3</sup>

##### ethanol 34%

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m<sup>3</sup>

##### propan-2-ol 25%

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

##### methanol

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m<sup>3</sup>

Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

#### propan-2-ol 25% (CAS: 67-63-0)

#### DNEL

Industry - Inhalation; Long term systemic effects: 500 mg/m<sup>3</sup>  
 Consumer - Dermal; Long term systemic effects: 319 mg/kg/day  
 Consumer - Oral; Long term systemic effects: 26 mg/kg/day  
 Consumer - Inhalation; Long term systemic effects: 89 mg/m<sup>3</sup>  
 Industry - Dermal; Long term systemic effects: 888 mg/kg/day

#### PNEC

- Fresh water; 140.9 mg/l  
 - marine water; 140.9 mg/l  
 - Intermittent release; 140.9 mg/l  
 - Sediment (Freshwater); 552 mg/kg  
 - Sediment (Marinewater); 552 mg/kg  
 - STP; 2251 mg/l  
 - Soil; 28 mg/kg

#### methanol (CAS: 67-56-1)

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### DNEL

Industry - Dermal; Long term systemic effects: 40 mg/kg/day  
 Industry - Inhalation; Long term systemic effects: 260 mg/m<sup>3</sup>  
 Industry - Dermal; Short term systemic effects: 40 mg/kg/day  
 Industry - Inhalation; Short term systemic effects: 260 mg/m<sup>3</sup>  
 Consumer - Dermal; Long term systemic effects: 8 mg/kg/day  
 Consumer - Inhalation; Long term systemic effects: 50 mg/m<sup>3</sup>  
 Consumer - Dermal; Short term systemic effects: 8 mg/kg/day  
 Consumer - Inhalation; Short term systemic effects: 50 mg/m<sup>3</sup>  
 Consumer - Oral; Short term systemic effects: 8 mg/kg/day

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

#### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

#### Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

#### Hygiene measures

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

#### Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

#### Environmental exposure controls

Keep container tightly sealed when not in use.

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### SECTION 9: Physical and chemical properties

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

Appearance	Aerosol.
Colour	Colourless.
Odour	Mint.
Odour threshold	Not available.
pH	Not applicable.
Melting point	Not determined.
Initial boiling point and range	-40 ~ -2°C @ 1013 hPa
Flash point	< -60°C Closed cup.
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.4 % Upper flammable/explosive limit: 10.9 %
Vapour pressure	590 - 1760 kPa @ °C
Vapour density	~ 1.5 @ 15°C
Relative density	~ 0.510 @ 15°C
Solubility(ies)	Soluble in the following materials: Organic solvents. Soluble in water.
Partition coefficient	log Pow: 2.3 - 2.8
Auto-ignition temperature	365°C
Decomposition Temperature	Not available.
Viscosity	Kinematic viscosity ≤ 20.5 mm²/s.
Oxidising properties	Not applicable.
Comments	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

#### 9.2. Other information

Other information	None.
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reactivity	See the other subsections of this section for further details.
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#### 10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
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#### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	The following materials may react strongly with the product: Oxidising agents.
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#### 10.4. Conditions to avoid

Conditions to avoid	Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised container: may burst if heated
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### 10.5. Incompatible materials

**Materials to avoid** No specific material or group of materials is likely to react with the product to produce a hazardous situation.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**ATE oral (mg/kg)** 31,990.4

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**ATE dermal (mg/kg)** 31,990.4

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

**ATE inhalation (vapours mg/l)** 319.9

**ATE inhalation (dusts/mists mg/l)** 53.32

#### Skin corrosion/irritation

**Animal data** Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Causes serious eye irritation.

#### Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

#### Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

#### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Based on available data the classification criteria are not met.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** STOT SE 3 - H336 May cause drowsiness or dizziness.

**Target organs** Central nervous system

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

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### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

### **General information**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

### **Inhalation**

A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.

### **Ingestion**

Due to the physical nature of this product, it is unlikely that ingestion will occur.

### **Skin contact**

Repeated exposure may cause skin dryness or cracking.

### **Eye contact**

Irritating to eyes.

### **Route of exposure**

Ingestion Inhalation Skin and/or eye contact

### **Target organs**

Central nervous system

### Toxicological information on ingredients.

#### Petroleum gases, liquefied

#### Skin corrosion/irritation

**Human skin model test** Scientifically unjustified.

**Extreme pH** Scientifically unjustified.

#### Germ cell mutagenicity

**Genotoxicity - in vivo** This substance has no evidence of mutagenic properties.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Does not contain any substances known to be toxic to reproduction.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

**Target organs** Central nervous system

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

**Target organs** Central nervous system

#### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

### **General information**

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

### **Inhalation**

Vapours may cause headache, fatigue, dizziness and nausea. Vapour may affect central nervous system. Symptoms following overexposure may include the following: Headache. Nausea, vomiting. Intoxication. May cause discomfort. Vapour may irritate respiratory system/lungs.

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<b>Ingestion</b>	May cause stomach pain or vomiting. Gastrointestinal symptoms, including upset stomach. May cause discomfort if swallowed. No harmful effects expected from quantities likely to be ingested by accident.
<b>Skin contact</b>	May cause defatting of the skin but is not an irritant.
<b>Eye contact</b>	Vapour or spray in the eyes may cause irritation and smarting.
<b>Acute and chronic health hazards</b>	Because of the product's quantity and composition, the health hazard is regarded as low.
<b>Route of exposure</b>	Inhalation Ingestion. Skin and/or eye contact

### ethanol 34%

#### Carcinogenicity

<b>IARC carcinogenicity</b>	IARC Group 1 Carcinogenic to humans.
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### propan-2-ol 25%

#### Acute toxicity - oral

<b>Acute toxicity oral (LD<sub>50</sub> mg/kg)</b>	5,840.0
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<b>Species</b>	Rat
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<b>Notes (oral LD<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
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#### Acute toxicity - dermal

<b>Acute toxicity dermal (LD<sub>50</sub> mg/kg)</b>	16.4
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<b>Species</b>	Rabbit
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<b>Notes (dermal LD<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
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#### Acute toxicity - inhalation

<b>Notes (inhalation LC<sub>50</sub>)</b>	Based on available data the classification criteria are not met.
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#### Skin corrosion/irritation

<b>Animal data</b>	Based on available data the classification criteria are not met.
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#### Serious eye damage/irritation

<b>Serious eye damage/irritation</b>	Causes serious eye irritation.
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#### Respiratory sensitisation

<b>Respiratory sensitisation</b>	Based on available data the classification criteria are not met.
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#### Skin sensitisation

<b>Skin sensitisation</b>	Based on available data the classification criteria are not met.
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#### Germ cell mutagenicity

<b>Genotoxicity - in vitro</b>	Based on available data the classification criteria are not met.
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#### Carcinogenicity

<b>Carcinogenicity</b>	Based on available data the classification criteria are not met.
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**IARC carcinogenicity** IARC Group 3 Not classifiable as to its carcinogenicity to humans.

**Reproductive toxicity**

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Based on available data the classification criteria are not met.

**Specific target organ toxicity - single exposure**

**STOT - single exposure** STOT SE 3 - H336 May cause drowsiness or dizziness.

**Target organs** Central nervous system

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**

**Aspiration hazard** Based on available data the classification criteria are not met. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

**General information** The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation** A single exposure may cause the following adverse effects: Headache. Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Narcotic effect.

**Ingestion** A single exposure may cause the following adverse effects: Confusion, agitation and/or excitation. Symptoms following overexposure may include the following: May cause nausea, headache, dizziness and intoxication. Unconsciousness.

**Skin contact** A single exposure may cause the following adverse effects: Temporary irritation. Prolonged contact may cause dryness of the skin.

**Eye contact** Irritating to eyes.

**Route of exposure** Ingestion Inhalation Skin and/or eye contact

**Target organs** Central nervous system

**methanol****Acute toxicity - oral**

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 1,130.0

**Species** Human

**ATE oral (mg/kg)** 300.0

**Acute toxicity - dermal**

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 15,800.0

**Species** Rabbit

**ATE dermal (mg/kg)** 300.0

**^ Bio Fogger****Acute toxicity - inhalation**

**Acute toxicity inhalation** 128.2  
(LC<sub>50</sub> vapours mg/l)

**Species** Rat

**ATE inhalation (vapours** 3.0  
**mg/l)**

**ATE inhalation** 0.5  
**(dusts/mists mg/l)**

**Serious eye damage/irritation**

**Serious eye** Not irritating.  
**damage/irritation**

**Respiratory sensitisation**

**Respiratory sensitisation** Guinea pig: Not sensitising.

**Skin sensitisation**

**Skin sensitisation** Not sensitising.

**Germ cell mutagenicity**

**Genotoxicity - in vitro** : Negative. This substance has no evidence of mutagenic properties.

**Carcinogenicity**

**Carcinogenicity** There is no evidence that the product can cause cancer.

**Reproductive toxicity**

**Reproductive toxicity -** - NOAEC 1.33 , , Rat Conclusive data but not sufficient for classification.  
**fertility**

**Specific target organ toxicity - single exposure**

**STOT - single exposure** LOAEL 2000 mg/kg, Oral, Rat

**Target organs** Eyes

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** NOAEC 0.13 mg/l/6hr/day, Inhalation, Rat

**Target organs** Heart and cardiovascular system Brain Liver Eyes

**Inhalation** Toxic by inhalation. The product contains organic solvents. Overexposure may depress the central nervous system, causing dizziness and intoxication.

**Ingestion** Toxic: danger of very serious irreversible effects if swallowed. Swallowing concentrated chemical may cause severe internal injury. May cause nausea, headache, dizziness and intoxication. May cause unconsciousness, blindness and possibly death.

**Skin contact** Toxic: danger of serious damage to health by prolonged exposure in contact with skin. Repeated exposure may cause skin dryness or cracking.

**Eye contact** Severe irritation, burning and tearing. A single exposure may cause the following adverse effects: Corneal damage.

**Route of exposure** Inhalation Ingestion. Skin and/or eye contact

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**Target organs** Central nervous system Eyes Gastro-intestinal tract Skin

didecyldimethylammonium chloride 0.16%

Acute toxicity - oral

**ATE oral (mg/kg)** 500.0

## SECTION 12: Ecological information

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

### Ecological information on ingredients.

#### Petroleum gases, liquefied

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

#### propan-2-ol 25%

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

#### methanol

**Ecotoxicity** Not regarded as dangerous for the environment.

### 12.1. Toxicity

**Toxicity** Based on available data the classification criteria are not met.

### Ecological information on ingredients.

#### Petroleum gases, liquefied

#### Acute aquatic toxicity

**Acute toxicity - fish** Not determined.

**Acute toxicity - aquatic invertebrates** Not determined.

**Acute toxicity - aquatic plants** Not determined.

**Acute toxicity - microorganisms** Not determined.

**Acute toxicity - terrestrial** Not determined.

#### propan-2-ol 25%

**Toxicity** Based on available data the classification criteria are not met.

#### Acute aquatic toxicity

**Acute toxicity - fish** LC50, 96 hours: ~ 9640 mg/l, Pimephales promelas (Fat-head Minnow)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, >: > 1000 mg/l, Daphnia magna

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**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: > 1000 mg/l, Scenedesmus subspicatus

**Acute toxicity - microorganisms** EC<sub>50</sub>, >: > 1000 mg/l, Activated sludge

**methanol****Acute aquatic toxicity**

**Acute toxicity - fish** LC<sub>50</sub>, 48 hours: > 10000 mg/l, Leuciscus idus (Golden orfe)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: > 1000 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 96 hours: 22000 mg/l, Selenastrum capricornutum

**didecyldimethylammonium chloride 0.16%****Acute aquatic toxicity**

**LE(C)<sub>50</sub>** 0.01 < L(E)C<sub>50</sub> ≤ 0.1

**M factor (Acute)** 10

**Chronic aquatic toxicity**

**M factor (Chronic)** 1

**Silver Chloride coated on Titanium Dioxide 0.0031%****Acute aquatic toxicity**

**LE(C)<sub>50</sub>** 0.01 < L(E)C<sub>50</sub> ≤ 0.1

**M factor (Acute)** 10

**12.2. Persistence and degradability**

**Persistence and degradability** The degradability of the product is not known.

**Ecological information on ingredients.****Petroleum gases, liquefied**

**Persistence and degradability** Volatile substances are degraded in the atmosphere within a few days.

**propan-2-ol 25%**

**Persistence and degradability** The product is readily biodegradable.

**Biodegradation** Degradation (%)  
- 95: 21 days

**Biological oxygen demand** ~ 1171 g O<sub>2</sub>/g substance

**Chemical oxygen demand** ~ 2294 g O<sub>2</sub>/g substance

**methanol**

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**Persistence and degradability** The product is readily biodegradable.

**Biodegradation** Degradation (%)  
- 82.7: 5 days

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** log Pow: 2.3 - 2.8

**Ecological information on ingredients.****Petroleum gases, liquefied**

**Bioaccumulative potential** Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.

**Partition coefficient** log Pow: ~ 2.3 - 2.8

**propan-2-ol 25%**

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** log Pow: 0.05

**methanol**

**Bioaccumulative potential** The product does not contain any substances expected to be bioaccumulating.

**Partition coefficient** : ~ 0.77

**12.4. Mobility in soil**

**Mobility** The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

**Ecological information on ingredients.****Petroleum gases, liquefied**

**Mobility** The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

**propan-2-ol 25%**

**Mobility** The product is water-soluble and may spread in water systems. Volatile liquid. The product contains organic solvents which will evaporate easily from all surfaces.

**Adsorption/desorption coefficient** Water - Koc: ~ 1.1 @ °C

**Henry's law constant** 0.00000338 atm m<sup>3</sup>/mol @ 25°C

**methanol**

**Mobility** The product is soluble in water. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

**Adsorption/desorption coefficient** Not available.



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### 12.5. Results of PBT and vPvB assessment

#### Ecological information on ingredients.

##### Petroleum gases, liquefied

**Results of PBT and vPvB assessment**      This product does not contain any substances classified as PBT or vPvB.

##### propan-2-ol 25%

**Results of PBT and vPvB assessment**      This substance is not classified as PBT or vPvB according to current EU criteria.

##### methanol

**Results of PBT and vPvB assessment**      This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

**Other adverse effects**      None known.

#### Ecological information on ingredients.

##### Petroleum gases, liquefied

**Other adverse effects**      None known.

##### propan-2-ol 25%

**Other adverse effects**      None known.

##### methanol

**Other adverse effects**      The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information**      The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

**Disposal methods**      Do not empty into drains. Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

## SECTION 14: Transport information

**General**      For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

**^ Bio Fogger****14.1. UN number**

UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
UN No. (ADN)	1950

**14.2. UN proper shipping name**

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

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

ADR/RID class	2.1
ADR/RID classification code	5F
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1
ADN class	2.1

**Transport labels****14.4. Packing group**

ADR/RID packing group	None
IMDG packing group	None
ICAO packing group	None
ADN packing group	None

**14.5. Environmental hazards**

Environmentally hazardous substance/marine pollutant  
No.

**14.6. Special precautions for user**

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS	F-D, S-U
ADR transport category	2
Tunnel restriction code	(D)

**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

### SECTION 15: Regulatory information

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

<b>National regulations</b>	Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits. The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).
<b>EU legislation</b>	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Council Directive of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers (75/324/EEC) (as amended).

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### Inventories

##### EU - EINECS/ELINCS

All the ingredients are listed or exempt.

### SECTION 16: Other information

<b>Abbreviations and acronyms used in the safety data sheet</b>	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. CAS: Chemical Abstracts Service. ATE: Acute Toxicity Estimate. LC <sub>50</sub> : Lethal Concentration to 50 % of a test population. LD <sub>50</sub> : Lethal Dose to 50% of a test population (Median Lethal Dose). EC <sub>50</sub> : 50% of maximal Effective Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative.
<b>Classification abbreviations and acronyms</b>	Aerosol = Aerosol Eye Irrit. = Eye irritation STOT SE = Specific target organ toxicity-single exposure
<b>Classification procedures according to Regulation (EC) 1272/2008</b>	STOT SE 3 - H336: Eye Irrit. 2 - H319: : Calculation method. Aerosol 1 - H222, H229: : Expert judgement.

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<b>Training advice</b>	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
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<b>Revision</b>	1
<b>SDS number</b>	21923
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H229 Pressurised container: may burst if heated. H280 Contains gas under pressure; may explode if heated. H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H336 May cause drowsiness or dizziness. H370 Causes damage to organs . H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.