

**SAFETY DATA SHEET****Differentiator 1**

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** Differentiator 1  
**Product number** PL.7065

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

**Identified uses** Laboratory reagent.  
**Uses advised against** No specific uses advised against are identified.

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

**Supplier** Pro-Lab Diagnostics  
 3 Bassendale Road  
 Wirral  
 Merseyside  
 CH62 3QL  
 Tel: 0151 353 1613  
 Fax: 0151 353 1614  
 mowen@pro-lab.com

**1.4. Emergency telephone number**

**Emergency telephone** +44 (0)151 353 1613 Monday to Friday 9.00 to 17.00  
 +44 (0)7714 429 646 outside the above hours

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification (EC 1272/2008)**

**Physical hazards** Flam. Liq. 2 - H225  
**Health hazards** Acute Tox. 4 - H332 Eye Irrit. 2 - H319 STOT SE 2 - H371  
**Environmental hazards** Not Classified  
**Human health** May irritate eyes. Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
**Physicochemical** The product is highly flammable.

**2.2. Label elements****Pictogram****Signal word**

Danger

**Hazard statements**

H225 Highly flammable liquid and vapour.  
 H319 Causes serious eye irritation.  
 H332 Harmful if inhaled.  
 H371 May cause damage to organs .

## Differentiator 1

<b>Precautionary statements</b>	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P312 Call a POISON CENTRE/doctor if you feel unwell.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
<b>Contains</b>	Methanol
<b>Supplementary precautionary statements</b>	<p>P233 Keep container tightly closed.</p> <p>P240 Ground and bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use non-sparking tools.</p> <p>P243 Take action to prevent static discharges.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P405 Store locked up.</p>

### 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>ethanol</b>		<b>50 - 100%</b>
CAS number: 64-17-5	EC number: 200-578-6	REACH registration number: 01-2119457610-43-XXXX
Substance with National workplace exposure limits.		
<b>Classification</b>		
Flam. Liq. 2 - H225		
Eye Irrit. 2 - H319		

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<b>methanol</b>		<b>2.5 - &lt;5%</b>
CAS number: 67-56-1	EC number: 200-659-6	REACH registration number: 01-2119433307-44-XXXX
<b>Classification</b>		
Flam. Liq. 2 - H225		
Acute Tox. 3 - H301		
Acute Tox. 3 - H311		
Acute Tox. 3 - H331		
STOT SE 1 - H370		
<b>hydrochloric acid</b>		<b>0.25 - &lt;0.5%</b>
CAS number: 7647-01-0	EC number: 231-595-7	
<b>Classification</b>		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
STOT SE 3 - H335		

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>	Keep affected person away from heat, sparks and flames.
<b>Inhalation</b>	Immediate first aid is imperative. Loosen tight clothing such as collar, tie or belt. Maintain an open airway. Move affected person to fresh air at once. Place unconscious person on their side in the recovery position and ensure breathing can take place. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. If in doubt, get medical attention promptly.
<b>Skin contact</b>	Rinse cautiously with water for several minutes. Remove contaminated clothing. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water. Get medical attention if symptoms are severe or persist after washing.

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

<b>Inhalation</b>	Symptoms following overexposure may include the following: Coughing, chest tightness, feeling of chest pressure. Drowsiness, dizziness, disorientation, vertigo. May cause discomfort.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin contact</b>	Prolonged contact may cause redness, irritation and dry skin.
<b>Eye contact</b>	Causes eye irritation.

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

<b>Notes for the doctor</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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### SECTION 5: Firefighting measures

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### 5.1. Extinguishing media

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** Flammable liquid and vapour. Vapours may be ignited by a spark, a hot surface or an ember.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Fight fire from safe distance or protected location. Use water spray to reduce vapours. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak.

**Special protective equipment for firefighters** Use air-supplied respirator, gloves and protective goggles. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Use protective equipment appropriate for surrounding materials.

## SECTION 6: Accidental release measures

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

**Personal precautions** Follow precautions for safe handling described in this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation.

### 6.2. Environmental precautions

**Environmental precautions** Avoid the spillage or runoff entering drains, sewers or watercourses.

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

**Methods for cleaning up** Take care as floors and other surfaces may become slippery. Contain spillage with sand, earth or other suitable non-combustible material. Absorb in vermiculite, dry sand or earth and place into containers. 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. For waste disposal, see Section 13. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid breathing vapours. Avoid contact with eyes and prolonged skin contact. Avoid the formation of mists. Ground/bond container and receiving equipment.

**Advice on general occupational hygiene** Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented. Take off contaminated clothing and wash it before reuse. Wash promptly with soap and water if skin becomes contaminated.

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

**Storage precautions** Keep at temperature not exceeding 25°C.

**Storage class** Flammable liquid storage.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

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### SECTION 8: Exposure Controls/personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

###### ethanol

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 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

###### hydrochloric acid

Long-term exposure limit (8-hour TWA): WEL 1 ppm 2 mg/m<sup>3</sup> gas and aerosol mists

Short-term exposure limit (15-minute): WEL 5 ppm 8 mg/m<sup>3</sup> gas and aerosol mists

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

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

##### DNEL

Workers - Inhalation; Long term systemic effects: 260 mg/m<sup>3</sup>

Workers - Inhalation; Short term systemic effects: 260 mg/m<sup>3</sup>

Workers - Inhalation; Long term local effects: 260 mg/m<sup>3</sup>

Workers - Inhalation; Short term local effects: 260 mg/m<sup>3</sup>

Workers - Dermal; Long term systemic effects: 40 mg/kg/day

Workers - Dermal; Short term systemic effects: 40 mg/kg/day

General population - Inhalation; Long term systemic effects: 50 mg/m<sup>3</sup>

General population - Inhalation; Short term systemic effects: 50 mg/m<sup>3</sup>

General population - Inhalation; Long term local effects: 50 mg/m<sup>3</sup>

General population - Inhalation; Short term local effects: 50 mg/m<sup>3</sup>

General population - Dermal; Long term systemic effects: 8 mg/kg/day

General population - Dermal; Short term systemic effects: 8 mg/kg/day

General population - Oral; Long term systemic effects: 8 mg/kg/day

General population - Oral; Short term systemic effects: 8 mg/kg/day

##### PNEC

- Fresh water; 20.8 mg/l

- Fresh water, Intermittent release; 1540 mg/l

- Marine water; 2.08 mg/l

- STP; 100 mg/l

- Sediment (Freshwater); 77 mg/kg

- Sediment (Marinewater); 7.7 mg/kg

- Soil; 100 mg/kg

#### 8.2. Exposure controls

##### Appropriate engineering controls

Avoid inhalation of vapours and spray/mists. Good general ventilation should be adequate to control worker exposure to airborne contaminants. In case of insufficient ventilation, wear suitable respiratory equipment.

##### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

##### 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. Frequent changes are recommended. The breakthrough time for any glove material may be different for different glove manufacturers.

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<b>Other skin and body protection</b>	Wear anti-static protective clothing if there is a risk of ignition from static electricity.
<b>Hygiene measures</b>	Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product. Good personal hygiene procedures should be implemented.
<b>Respiratory protection</b>	If ventilation is inadequate, suitable respiratory protection must be worn. Seek advice from supervisor on the company's respiratory protection standards. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible.

### SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Alcoholic.
<b>pH</b>	Not relevant.
<b>Melting point</b>	Not relevant.
<b>Initial boiling point and range</b>	78 - 100°C @ 1013 hPa
<b>Flash point</b>	~ 18°C
<b>Evaporation rate</b>	Not determined.
<b>Flammability (solid, gas)</b>	Not determined.
<b>Upper/lower flammability or explosive limits</b>	Not determined.
<b>Vapour pressure</b>	Not determined.
<b>Vapour density</b>	Not relevant.
<b>Relative density</b>	Not determined.
<b>Solubility(ies)</b>	Soluble in water.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	Not determined.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Does not meet the criteria for classification as oxidising.

#### 9.2. Other information

<b>Other information</b>	None.
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	No test data specifically related to reactivity available for this product or its ingredients.
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#### 10.2. Chemical stability

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**Stability** Stable at normal ambient temperatures and when used as recommended.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Acids. Alkalis. Oxidising agents.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition.

### 10.5. Incompatible materials

**Materials to avoid** Acids. Alkalis. Oxidising agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Nitrous gases (NO<sub>x</sub>). Hydrocarbons. Does not decompose when used and stored as recommended.

## 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)** 6,060.73

#### Acute toxicity - dermal

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

**ATE dermal (mg/kg)** 6,060.73

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Acute Tox. 4 - H332 Harmful if inhaled.

**ATE inhalation (gases ppm)** 14,141.7

**ATE inhalation (vapours mg/l)** 60.61

#### Skin corrosion/irritation

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

#### Serious eye damage/irritation

**Serious eye damage/irritation** Causes 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.

#### Specific target organ toxicity - single exposure

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**STOT - single exposure** STOT SE 2 - H371

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Based on available data the classification criteria are not met.

### Aspiration hazard

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure.

**Inhalation** May be harmful if inhaled. Symptoms following overexposure may include the following: Pain or irritation. Irritation of nose, throat and airway. Coughing. Wheezing/breathing difficulties.

**Ingestion** May cause discomfort if swallowed.

**Skin contact** No specific symptoms known. Prolonged and frequent contact may cause redness and irritation.

**Eye contact** Irritating to eyes.

**Acute and chronic health hazards** Causes damage to organs .

### Toxicological information on ingredients.

#### ethanol

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 10,470.0

**Species** Rat

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

**ATE oral (mg/kg)** 10,470.0

##### Acute toxicity - inhalation

**Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)** 124.7

**Species** Rat

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

**ATE inhalation (vapours mg/l)** 124.7

##### Skin corrosion/irritation

**Animal data** Dose: 0.2 ml, 24 hours, Rabbit Primary dermal irritation index: 0 / 8 REACH dossier information. Not irritating.

##### Serious eye damage/irritation

**Serious eye damage/irritation** Dose: 0.1 mL, 21 days, Rabbit Causes eye irritation. REACH dossier information.

##### Respiratory sensitisation

**Respiratory sensitisation** Rat: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

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### Skin sensitisation

**Skin sensitisation** Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Read across data. Based on available data the classification criteria are not met.

### Germ cell mutagenicity

**Genotoxicity - in vitro** Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

**Genotoxicity - in vivo** Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

### Carcinogenicity

**IARC carcinogenicity** IARC Group 1 Carcinogenic to humans.

### Reproductive toxicity

**Reproductive toxicity - fertility** Two-generation study - NOAEL 15 %, Oral, Mouse P REACH dossier information.

**Reproductive toxicity - development** Maternal toxicity: - NOAEL: 16000 ppm, Inhalation, Rat REACH dossier information.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** LOAEL 4 mL/Kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

### methanol

### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** International Programme on Chemical Safety (IPCS) (1997) Environmental Health Criteria 196: Methanol. Geneva, World Health Organization. Toxic if swallowed.

**ATE oral (mg/kg)** 100.0

### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Converted acute toxicity point estimate (cATpE) Toxic in contact with skin.

### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Converted acute toxicity point estimate (cATpE) Toxic if inhaled.

**ATE inhalation (gases ppm)** 700.0

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

### Skin corrosion/irritation

**Animal data** Dose: 2.5cm x 2.5cm, 20 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met.

### Serious eye damage/irritation

**Serious eye damage/irritation** Dose: 0.05 ml, 24 hours, Rabbit REACH dossier information. Based on available data the classification criteria are not met.

### Skin sensitisation

## Differentiator 1

**Skin sensitisation** Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

### Germ cell mutagenicity

**Genotoxicity - in vitro** Bacterial reverse mutation test: Negative. REACH dossier information. Based on available data the classification criteria are not met.

**Genotoxicity - in vivo** Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

**STOT - single exposure** STOT SE 1 - H370

**Target organs** Eyes Central nervous system

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** LOAEL 2340 mg/kg/day, Oral, Monkey REACH dossier information. Based on available data the classification criteria are not met.

## hydrochloric acid

### Skin corrosion/irritation

**Animal data** Dose: 0.5 ml (37%), 1 / 4 hours, Rabbit REACH dossier information. Skin Corr. 1B - H314 Causes severe skin burns and eye damage.

### Serious eye damage/irritation

**Serious eye damage/irritation** Dose: 0.1 ml (10%), 1 second, Rabbit REACH dossier information. Eye Dam. 1 - H318 Causes serious eye damage.

### Skin sensitisation

**Skin sensitisation** Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information.

### Carcinogenicity

**Carcinogenicity** NOAEL < 10 ppm, Inhalation, Rat REACH dossier information. No evidence of carcinogenicity in animal studies.

**IARC carcinogenicity** IARC Group 3 Not classifiable as to its carcinogenicity to humans.

### Specific target organ toxicity - single exposure

**STOT - single exposure** STOT SE 3 - H335 May cause respiratory irritation.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** NOAEL 20 ppm, Inhalation, Rat REACH dossier information.

## SECTION 12: Ecological Information

### 12.1. Toxicity

**Toxicity** Based on available data the classification criteria are not met. However, large or frequent spills may have hazardous effects on the environment.

### Ecological information on ingredients.

## ethanol

### Acute aquatic toxicity

## Differentiator 1

<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hours: 14200 mg/l, Pimephales promelas (Fat-head Minnow) REACH dossier information.
<b>Acute toxicity - aquatic invertebrates</b>	LC <sub>50</sub> , 48 hours: 5012 mg/l, Ceriodaphnia dubia REACH dossier information.
<b>Acute toxicity - aquatic plants</b>	EC <sub>50</sub> , 72 hours: 275 mg/l, Chlorella vulgaris REACH dossier information.
<b><u>Chronic aquatic toxicity</u></b>	
<b>Chronic toxicity - fish early life stage</b>	NOEC, 120 hours: 250 mg/l, Brachydanio rerio (Zebra Fish)
<b>Chronic toxicity - aquatic invertebrates</b>	NOEC, 9 days: 9.6 mg/l, Daphnia magna REACH dossier information.

### methanol

#### Acute aquatic toxicity

<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill) EC <sub>50</sub> , 96 hours: 12700 mg/l, Lepomis macrochirus (Bluegill) REACH dossier information.
<b>Acute toxicity - aquatic invertebrates</b>	EC <sub>50</sub> , 96 hours: 18260 mg/l, Daphnia magna REACH dossier information.
<b>Acute toxicity - aquatic plants</b>	EC <sub>50</sub> , 96 hours: ~ 22000 mg/l, Pseudokirchneriella subcapitata REACH dossier information.
<b>Acute toxicity - microorganisms</b>	IC <sub>50</sub> , 3 hours: >1000 mg/l, Activated sludge REACH dossier information.

### hydrochloric acid

#### Acute aquatic toxicity

<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hours: pH 3.25 - 3.5 , Lepomis macrochirus (Bluegill) REACH dossier information.
<b>Acute toxicity - aquatic invertebrates</b>	NOEC, 48 hours: pH 5.5 , Daphnia magna EC <sub>50</sub> , 48 hours: pH 4.92 , Daphnia magna REACH dossier information.
<b>Acute toxicity - aquatic plants</b>	EC <sub>50</sub> , 72 hours: pH 4.7 , Chlorella vulgaris REACH dossier information.
<b>Acute toxicity - microorganisms</b>	EC <sub>50</sub> , 3 hours: pH 5 - 5.5 , Activated sludge REACH dossier information.

## 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product. Volatile substances are degraded in the atmosphere within a few days.

## Ecological information on ingredients.

### ethanol

<b>Biodegradation</b>	Water - Degradation (74%): 10 days REACH dossier information. The substance is readily biodegradable.
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**Chemical oxygen demand** 1.99 g O<sub>2</sub>/g substance REACH dossier information.

### methanol

**Phototransformation** Water - DT<sub>50</sub> : 17.2 days  
REACH dossier information.

**Biodegradation** Water - Degradation (95%): 20 days  
Water - Degradation (91%): 15 days  
Water - Degradation (88%): 10 days  
Water - Degradation (76%): 5 days  
REACH dossier information.  
The substance is readily biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Not determined.

**Partition coefficient** Not determined.

### Ecological information on ingredients.

#### ethanol

**Partition coefficient** log Pow: - 0.35 REACH dossier information.

#### methanol

**Partition coefficient** log Pow: -0.77 REACH dossier information.

### 12.4. Mobility in soil

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

### Ecological information on ingredients.

#### ethanol

**Surface tension** 24.5 mN/m @ 20°C/68°F REACH dossier information.

#### methanol

**Mobility** Mobile.

### 12.5. Results of PBT and vPvB assessment

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

### Ecological information on ingredients.

#### ethanol

**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.

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### 12.6. Other adverse effects

Other adverse effects Not relevant.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**General information** Reuse or recycle products wherever possible. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

**Disposal methods** Absorb in vermiculite, dry sand or earth and place into containers. Place waste in labelled, sealed containers. Dispose of contents/container in accordance with national regulations.

### SECTION 14: Transport information

#### 14.1. UN number

UN No. (ADR/RID) 1993

UN No. (IMDG) 1993

UN No. (ICAO) 1993

UN No. (ADN) 1993

#### 14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, N.O.S. (ethanol)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (ethanol)

Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (ethanol)

Proper shipping name (ADN) FLAMMABLE LIQUID, N.O.S. (ethanol)

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

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

#### Transport labels



#### 14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ADN packing group II

ICAO packing group II

#### 14.5. Environmental hazards

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### Environmentally hazardous substance/marine pollutant

No.

#### 14.6. Special precautions for user

EmS F-E, S-E

ADR transport category 2

Emergency Action Code •3YE

Hazard Identification Number 33  
(ADR/RID)

Tunnel restriction code (D/E)

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

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

### SECTION 15: Regulatory information

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

National regulations EH40/2005 Workplace exposure limits.

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

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

**Abbreviations and acronyms used in the safety data sheet**

ATE: Acute Toxicity Estimate.  
cATpE: Converted Acute Toxicity Point Estimate.  
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.  
IATA: International Air Transport Association.  
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.  
IMDG: International Maritime Dangerous Goods.  
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).  
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.  
EC<sub>50</sub>: 50% of maximal Effective Concentration.  
LOAEL: Lowest Observed Adverse Effect Level.  
NOAEL: No Observed Adverse Effect Level.

## Differentiator 1

<b>Classification abbreviations and acronyms</b>	Acute Tox. = Acute toxicity Eye Dam. = Serious eye damage Eye Irrit. = Eye irritation Flam. Liq. = Flammable liquid Skin Corr. = Skin corrosion STOT SE = Specific target organ toxicity-single exposure
<b>Classification procedures according to Regulation (EC) 1272/2008</b>	Flam. Liq. 2 - H225: Expert judgement. Acute Tox. 4 - H332, Eye Irrit. 2 - H319, STOT SE 2 - H371: Calculation method.
<b>Revision date</b>	01/10/2017
<b>Revision</b>	7
<b>Supersedes date</b>	27/09/2016
<b>SDS number</b>	784
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H311 Toxic in contact with skin. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H370 Causes damage to organs . H371 May cause damage to organs .

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