SAFETY DATA SHEET
Crystal Violet (Ammonium Oxalate)

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

1.1. Product identifier
Product name: Crystal Violet (Ammonium Oxalate)
Product number: PL.7073, PL.7074, PL.7075

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. 3 - H226
Health hazards: Eye Irrit. 2 - H319 Carc. 2 - H351
Environmental hazards: Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC) Xi; R36. Carc. Cat. 3 R40. R52/53, R10

2.2. Label elements
Pictogram

Signal word: Warning
Hazard statements: H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H412 Harmful to aquatic life with long lasting effects.
Crystal Violet (Ammonium Oxalate)

Precautionary statements
P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273 Avoid release to the environment.
P280 Wear protective clothing, gloves, eye and face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container in accordance with national regulations.

Contains
C.I. basic violet 3

Supplementary precautionary statements
P202 Do not handle until all safety precautions have been read and understood.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash contaminated skin thoroughly after handling.
P303+P361 IF exposed or concerned: Get medical advice/attention.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>5 - &lt;10%</td>
</tr>
<tr>
<td>Substances with National workplace exposure limits.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>Classification (67/548/EEC or 1999/45/EC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2</td>
<td>H225 F; R11</td>
</tr>
<tr>
<td>C.I. basic violet 3</td>
<td>Classification (67/548/EEC or 1999/45/EC)</td>
</tr>
<tr>
<td>CAS number: 548-62-9</td>
<td>EC number: 208-953-6</td>
</tr>
<tr>
<td>M factor (Acute) = 1</td>
<td>M factor (Chronic) = 1</td>
</tr>
<tr>
<td>Acute Tox. 4</td>
<td>H302 Xn; R22. Xi; R41, R38. Carc. Cat. 3 R40. N; R50/53</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>H315</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>H318</td>
</tr>
<tr>
<td>Carc. 2</td>
<td>H351</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>H400</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>H410</td>
</tr>
</tbody>
</table>
Crystal Violet (Ammonium Oxalate)

<table>
<thead>
<tr>
<th>Crystal Violet (Ammonium Oxalate)</th>
</tr>
</thead>
</table>

- **methanol**: 0.5 - <1%
- **CAS number**: 67-56-1
- **EC number**: 200-659-6
- **REACH registration number**: 01-2119433307-44-XXXX

<table>
<thead>
<tr>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 2 - H225</td>
</tr>
<tr>
<td>Acute Tox. 3 - H301</td>
</tr>
<tr>
<td>Acute Tox. 3 - H311</td>
</tr>
<tr>
<td>Acute Tox. 3 - H331</td>
</tr>
<tr>
<td>STOT SE 1 - H370</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification (67/548/EEC or 1999/45/EC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F; R11. T; R23/24/25, R39/23/24/25</td>
</tr>
</tbody>
</table>

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**SECTION 4: First aid measures**

4.1. Description of first aid measures

- **General information**: Keep affected person away from heat, sparks and flames.
- **Inhalation**: 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.
- **Ingestion**: Rinse mouth thoroughly with water. Do not induce vomiting unless under the direction of medical personnel. If in doubt, get medical attention promptly.
- **Skin contact**: Rinse cautiously with water for several minutes. Remove contaminated clothing. Wash contaminated clothing before reuse.
- **Eye contact**: 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

- **Inhalation**: Symptoms following overexposure may include the following: Coughing, chest tightness, feeling of chest pressure. Drowsiness, dizziness, disorientation, vertigo. May cause discomfort.
- **Ingestion**: Coughing, chest tightness, feeling of chest pressure. Gastrointestinal symptoms, including upset stomach.
- **Skin contact**: Prolonged contact may cause redness, irritation and dry skin.
- **Eye contact**: Causes serious eye irritation. Profuse watering of the eyes. Prolonged contact may cause redness and/or tearing.

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

**Notes for the doctor**: The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**SECTION 5: Firefighting measures**

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
Crystal Violet (Ammonium Oxalate)

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

5.3. Advice for firefighters
Control run-off water by containing and keeping it out of sewers and watercourses. 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. Keep unnecessary and unprotected personnel away from the spillage. Treat the spilled material according to the instructions in the clean-up section.

6.2. Environmental precautions
Environmental precautions
Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material. The product contains substances which are water-soluble and may spread in water systems. The product contains volatile substances which may spread in the atmosphere.

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.
Crystal Violet (Ammonium Oxalate)

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/m³

**methanol**

Long-term exposure limit (8-hour TWA): WEL 200 ppm  266 mg/m³
Short-term exposure limit (15-minute):  WEL 250 ppm  333 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

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.

**Other skin and body protection**

Wear anti-static protective clothing if there is a risk of ignition from static electricity.

**Hygiene measures**

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.

**Respiratory protection**

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

**Appearance**

Liquid.

**Colour**

Dark. Violet.

**Odour**

Almost odourless. Alcoholic.

**pH**

Not relevant.

**Melting point**

Not relevant.

**Initial boiling point and range**

Not determined.

**Flash point**

~ 50°C

**Evaporation rate**

Not determined.

**Flammability (solid, gas)**

Not determined.
Crystal Violet (Ammonium Oxalate)

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not relevant.</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not considered to be explosive.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Does not meet the criteria for classification as oxidising.</td>
</tr>
</tbody>
</table>

9.2. Other information

Other information None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity

No test data specifically related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stability

Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions


10.4. Conditions to avoid

Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid


10.6. Hazardous decomposition products

Hazardous decomposition products

Thermal decomposition or combustion products may include the following substances:

Carbon dioxide (CO2). Carbon monoxide (CO). Nitrous gases (NOx). 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 LD₅₀)

Based on available data the classification criteria are not met.

ATE oral (mg/kg)

18,594.43760681

Acute toxicity - dermal

Notes (dermal LD₅₀)

Based on available data the classification criteria are not met.

ATE dermal (mg/kg)

33,366.70003337
Crystal Violet (Ammonium Oxalate)

**Acute toxicity - inhalation**

*Notes (inhalation LC₅₀)* Based on available data the classification criteria are not met.

ATE inhalation (gases ppm) 77,855.63341119

ATE inhalation (vapours mg/l) 333.66700033

**Skin corrosion/irritation**

*Animal data*

Based on available data the classification criteria are not met.

**Serious eye damage/irritation**

Eye Irrit. 2 - H319 Causes serious eye irritation.

**Respiratory sensitisation**

Based on available data the classification criteria are not met.

**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**

Carc. 2 - H351 Suspected of causing cancer.

**Reproductive toxicity**

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

**Specific target organ toxicity - single exposure**

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

**Specific target organ toxicity - repeated exposure**

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

**Aspiration hazard**

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

**Toxicological information on ingredients.**

<table>
<thead>
<tr>
<th>Ethanol</th>
</tr>
</thead>
</table>

**Acute toxicity - oral**

*Acute toxicity oral (LD₅₀ mg/kg)* 10,470.0

*Species* Rat

*Notes (oral LD₅₀)* 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 (LC₅₀ vapours mg/l)* 124.7

*Species* Rat

*Notes (inhalation LC₅₀)* REACH dossier information. Based on available data the classification criteria are not met.
## Crystal Violet (Ammonium Oxalate)

<table>
<thead>
<tr>
<th>ATE inhalation (vapours mg/l)</th>
<th>124.7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Animal data</strong></td>
<td>Dose: 0.2 ml, 24 hours, Rabbit Primary dermal irritation index: 0 / 8 REACH dossier information. Not irritating.</td>
</tr>
<tr>
<td><strong>Skin sensitisation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Skin sensitisation</strong></td>
<td>Guinea pig maximization test (GPMT) - Mouse: Not sensitising. REACH dossier information. Read across data. Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Genotoxicity - in vitro</strong></td>
<td>Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Genotoxicity - in vivo</strong></td>
<td>Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.</td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>IARC carcinogenicity</strong></td>
<td>IARC Group 1 Carcinogenic to humans.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Reproductive toxicity - fertility</strong></td>
<td>Two-generation study - NOAEL 15 %, Oral, Mouse P REACH dossier information.</td>
</tr>
<tr>
<td><strong>Reproductive toxicity - development</strong></td>
<td>Maternal toxicity: - NOAEL: 16000 ppm, Inhalation, Rat REACH dossier information.</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity - repeated exposure</strong></td>
<td></td>
</tr>
<tr>
<td><strong>STOT - repeated exposure</strong></td>
<td>LOAEL 4 mL/Kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.</td>
</tr>
</tbody>
</table>

### C.I. basic violet 3

| **Acute toxicity - oral** |       |
| **Acute toxicity oral (LD₅₀ mg/kg)** | 420.0 |
| **Species**               | Rat   |
| **Notes (oral LD₅₀)**     | Raw material suppliers' information. |
| **ATE oral (mg/kg)**      | 420.0 |
| **Skin corrosion/irritation** |       |
| **Animal data**           | Skin Irrit. 2 - H315 Causes skin irritation. |

**Serious eye damage/irritation**

| **Serious eye damage/irritation** | REACH dossier information. Eye Dam. 1 - H318 Causes serious eye damage. |
| **Germ cell mutagenicity**        |       |
| **Genotoxicity - in vitro**       | Bacterial reverse mutation test: Negative. REACH dossier information. Based on available data the classification criteria are not met. |
| **Carcinogenicity**               |       |
## Crystal Violet (Ammonium Oxalate)

### Carcinogenicity

Carc. 2 - H351 Suspected of causing cancer.

### Acute toxicity - oral

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE oral (mg/kg)</td>
<td>300.0</td>
</tr>
</tbody>
</table>

### Acute toxicity - dermal

<table>
<thead>
<tr>
<th>Notes (dermal LD₅₀)</th>
<th>Converted acute toxicity point estimate (cATpE) Toxic in contact with skin.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE dermal (mg/kg)</td>
<td>300.0</td>
</tr>
</tbody>
</table>

### Acute toxicity - inhalation

<table>
<thead>
<tr>
<th>Notes (inhalation LC₅₀)</th>
<th>Converted acute toxicity point estimate (cATpE) Toxic if inhaled.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE inhalation (gases ppm)</td>
<td>700.0</td>
</tr>
<tr>
<td>ATE inhalation (vapours mg/l)</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### 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

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

### Specific target organ toxicity - single exposure

| Target organs | Eyes, Central nervous system |

## SECTION 12: Ecological Information

### 12.1. Toxicity

**Toxicity**

Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

### Ecological information on ingredients

| ethanold |

<table>
<thead>
<tr>
<th>Acute toxicity - fish</th>
<th>LC₅₀, 96 hours: 14200 mg/l, Pimephales promelas (Fat-head Minnow) REACH dossier information.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - aquatic invertebrates</td>
<td>LC₅₀, 48 hours: 5012 mg/l, Ceriodaphnia dubia REACH dossier information.</td>
</tr>
</tbody>
</table>
Crystal Violet (Ammonium Oxalate)

Acute toxicity - aquatic plants
EC₅₀, 72 hours: 11.5 mg/l, Chlorella vulgaris
REACH dossier information.

Chronic toxicity - aquatic invertebrates
NOEC, 9 days: 9.6 mg/l, Daphnia magna
REACH dossier information.

C.I. basic violet 3

Toxicity
Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

Acute aquatic toxicity

LE(C)₅₀

0.1 < L(E)C50 ≤ 1

M factor (Acute)

1

Acute toxicity - aquatic invertebrates
EC₅₀, 48 hours: 0.24 - 0.5 mg/l, Daphnia magna
REACH dossier information.

Acute toxicity - aquatic plants
EC₅₀, 72 hours: 0.025 - 0.8 mg/l, Pseudokirchneriella subcapitata
REACH dossier information.

Chronic aquatic toxicity

M factor (Chronic)

1

methanol

Acute toxicity - fish
LC₅₀, 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill)
EC₅₀, 96 hours: 12700 mg/l, Lepomis macrochirus (Bluegill)
REACH dossier information.

Acute toxicity - aquatic invertebrates
EC₅₀, 96 hours: 18260 mg/l, Daphnia magna
REACH dossier information.

Acute toxicity - aquatic plants
EC₅₀, 96 hours: ~ 22000 mg/l, Pseudokirchneriella subcapitata
REACH dossier information.

Acute toxicity - microorganisms
IC₅₀, 3 hours: >1000 mg/l, 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

Biodegradation
Water - Degradation (74%): 10 days
REACH dossier information.
The substance is readily biodegradable.

Chemical oxygen demand
1.99 g O₂/g substance REACH dossier information.

C.I. basic violet 3

Biodegradation
Water - Degradation (3.6%): 28 days
REACH dossier information.
The substance is readily biodegradable.
Crystal Violet (Ammonium Oxalate)

Phototransformation
Water - DT₅₀ : 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.

C.I. basic violet 3
Partition coefficient log Pow: 1.172 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.

C.I. basic violet 3
Surface tension 44.2 mN/m REACH dossier information.

methanol

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.

12.6. Other adverse effects
Other adverse effects Not relevant.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Crystal Violet (Ammonium Oxalate)

**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. Do not empty into drains. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Collect and place in suitable waste disposal containers and seal securely. Dispose of contents/container in accordance with national regulations.

### SECTION 14: Transport information

**14.1. UN number**

| UN No. (ADR/RID) | 1987 |
| UN No. (IMDG)   | 1987 |
| UN No. (ICAO)   | 1987 |
| UN No. (ADN)    | 1987 |

**14.2. UN proper shipping name**

| Proper shipping name (ADR/RID) | ALCOHOLS, N.O.S. (ethanol) |
| Proper shipping name (IMDG)    | ALCOHOLS, N.O.S. (ethanol) |
| Proper shipping name (ICAO)    | ALCOHOLS, N.O.S. (ethanol) |
| Proper shipping name (ADN)     | ALCOHOLS, 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 | III |
| IMDG packing group    | III |
| ADN packing group     | III |
| ICAO packing group    | III |

**14.5. Environmental hazards**

Environmentally hazardous substance/marine pollutant No.
Crystal Violet (Ammonium Oxalate)

14.6. Special precautions for user

EmS F-E, S-D
ADR transport category 3
Emergency Action Code •3Y
Hazard Identification Number (ADR/RID) 30
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 applicable.

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.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments Classification modification.
Revision date 27/09/2016
Revision 6
Supersedes date 18/06/2015
SDS number 781
**Crystal Violet (Ammonium Oxalate)**

**Risk phrases in full**

- R10 Flammable.
- R11 Highly flammable.
- R22 Harmful if swallowed.
- R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
- R36 Irritating to eyes.
- R38 Irritating to skin.
- R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
- R40 Limited evidence of a carcinogenic effect.
- R41 Risk of serious damage to eyes.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Hazard statements in full**

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H351 Suspected of causing cancer.
- H370 Causes damage to organs (Eyes, Central nervous system).
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

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The information in this safety data sheet was obtained from current and reliable sources. However, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Pro-Lab Diagnostics control, it is the users responsibility to perform thorough testing of this product when used in combination with any other product. It is suggested that users familiarise themselves with this safety data sheet before handling the product.