SAFETY DATA SHEET
ENGINE FLUSH - GARDX

Page: 1
Compilation date: 07/07/2015
Revision date: 10/12/2015
Revision No: 1.1

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

1.1. Product identifier

Product name: ENGINE FLUSH - GARDX
Product code: T1312

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

1.3. Details of the supplier of the safety data sheet

Company name: GardX International Ltd
Unit 7, Clovelly Business Park, Clovelly Road
Southbourne, Emsworth
Hampshire
PO10 8PE
United Kingdom
Tel: 01243 376 426
Fax: 01243 370 909
Email: info@gardx.co.uk

1.4. Emergency telephone number

Emergency tel: 01405 768 815
(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Asp. Tox. 1: H304; -: EUH066
Most important adverse effects: May be fatal if swallowed and enters airways. Repeated exposure may cause skin dryness or cracking.

2.2. Label elements

Label elements:
Hazard statements: H304: May be fatal if swallowed and enters airways.
EUH066: Repeated exposure may cause skin dryness or cracking.
Hazard pictograms: GHS08: Health hazard

Signal words: Danger
Precautionary statements: P280: Wear protective gloves.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER/doctor./

[cont...]
Section 3: Composition/information on ingredients

Hazardous ingredients:

HYDROCARBONS, C11-14, N-ALKANES, ISOALKANES, CYCLIC, <2% AROMATICS - REACH registered number(s): 01-2119456620-43

<table>
<thead>
<tr>
<th>EINECS</th>
<th>CAS</th>
<th>PBT / WEL</th>
<th>CLP Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>926-141-6</td>
<td>-</td>
<td>-</td>
<td>Asp. Tox. 1: H304; -: EUH066</td>
<td>50-70%</td>
</tr>
<tr>
<td>918-668-5</td>
<td>64742-95-6</td>
<td>-</td>
<td>Flam. Liq. 3: H226; Asp. Tox. 1: H304; STOT SE 3: H335; Aquatic Chronic 2: H411; STOT SE 3: H336</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>1,2,4-TRIMETHYLBENZENE</td>
<td>202-436-9</td>
<td>95-63-6</td>
<td>Flam. Liq. 3: H226; Acute Tox. 4: H332; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H315; Aquatic Chronic 2: H411</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>MESITYLENE</td>
<td>203-604-4</td>
<td>108-67-8</td>
<td>Flam. Liq. 3: H226; STOT SE 3: H335; Aquatic Chronic 2: H411</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>PROPYL BENZENE</td>
<td>203-132-9</td>
<td>103-65-1</td>
<td>Flam. Liq. 3: H226; Asp. Tox. 1: H304; STOT SE 3: H335; Aquatic Chronic 2: H411</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin.

Eye contact: Bathe the eye with running water for 15 minutes.

Ingestion: Do not induce vomiting. Wash out mouth with water. Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation of vapours.

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

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur. There may be vomiting and diarrhoea.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

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

**Immediate / special treatment:** Do not induce vomiting. Eye bathing equipment should be available on the premises.

### Section 5: Fire-fighting measures

#### 5.1. Extinguishing media

**Extinguishing media:** Use water spray to cool containers. Suitable extinguishing media for the surrounding fire should be used.

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

**Exposure hazards:** In combustion emits toxic fumes.

#### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

### Section 6: Accidental release measures

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

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid.

#### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

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

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

#### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS.

### Section 7: Handling and storage

#### 7.1. Precautions for safe handling

**Handling requirements:** Ensure there is sufficient ventilation of the area.

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

**Storage conditions:** Store in a cool, well ventilated area.

**Suitable packaging:** Must only be kept in original packaging.

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

### Section 8: Exposure controls/personal protection

#### 8.1. Control parameters

[cont...]
Hazardous ingredients:
HYDROCARBONS, C11-14, N-ALKANES, ISOALKANES, CYCLIC, <2% AROMATICS

<table>
<thead>
<tr>
<th>Workplace exposure limits:</th>
<th>Respirable dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>8 hour TWA</td>
</tr>
<tr>
<td>UK</td>
<td>1200mg/m³</td>
</tr>
</tbody>
</table>

1,2,4-TRIMETHYLBENZENE
| UK | 125 mg/m³ | - | - | - |

MESITYLENE
| UK | 25 ppm | - | - | - |

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.
Respiratory protection: Respiratory protection not required.
   Hand protection: Gloves (solvent-resistant). Breakthrough time of the glove material > 4 hours.
   Eye protection: Safety glasses. Ensure eye bath is to hand.
Skin protection: Protective clothing.
Environmental: Prevent from entering in public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| State | Liquid |
| Colour | Pale yellow |
| Odour | Characteristic odour |
| Evaporation rate | Slow |
| Oxidising | Not applicable. |
| Solubility in water | Insoluble |
| Also soluble in | Most organic solvents. |
| Viscosity | Non-viscous |
| Kinematic viscosity | <7.0 |
| Viscosity test method | Kinematic viscosity in 10-6 m²/s at 40°C (ISO 3104/3105) |
| Boiling point/range°C | 170-300 |
| Melting point/range°C | No data available. |
| Flammability limits %: lower | No data available. |
| Flash point°C | >65 |
| Part.coeff. n-octanol/water | No data available. |
| Autoignition temperature | No data available. |
| Relative density | 0.830 |
| pH | Not applicable. |
| VOC g/l | No data available. |

9.2. Other information

Other information: No data available.

[cont...]
Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid


10.5. Incompatible materials

Materials to avoid: Oxidising agents. Reducing agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

**HYDROCARBONS, C11-14, N-ALKANES, ISOALKANES, CYCLIC, <2% AROMATICS**

<table>
<thead>
<tr>
<th></th>
<th>RBT</th>
<th>LD50</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DERMAL</td>
<td>RBT</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
</tr>
<tr>
<td>ORAL</td>
<td>RAT</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
</tr>
<tr>
<td>VAPOURS</td>
<td>RAT</td>
<td>4H LC50</td>
<td>&gt;5000 mg/kg</td>
</tr>
</tbody>
</table>

**HYDROCARBONS, C9, AROMATICS**

<table>
<thead>
<tr>
<th></th>
<th>RBT</th>
<th>LD50</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DERMAL</td>
<td>RBT</td>
<td>LD50</td>
<td>3160 mg/l</td>
</tr>
<tr>
<td>ORAL</td>
<td>RAT</td>
<td>LD50</td>
<td>3492 mg/kg</td>
</tr>
<tr>
<td>VAPOURS</td>
<td>RAT</td>
<td>4H LC50</td>
<td>6193 mg/l</td>
</tr>
</tbody>
</table>

**1,2,4-TRIMETHYLBENZENE**

<table>
<thead>
<tr>
<th></th>
<th>RBT</th>
<th>LD50</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IPR</td>
<td>RAT</td>
<td>LDLO</td>
<td>1752 mg/kg</td>
</tr>
<tr>
<td>ORL</td>
<td>RAT</td>
<td>LD50</td>
<td>5 gm/kg</td>
</tr>
</tbody>
</table>

**MESITYLENE**

<table>
<thead>
<tr>
<th></th>
<th>GPG</th>
<th>LDLO</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IPR</td>
<td>GPG</td>
<td>LDLO</td>
<td>1303 mg/kg</td>
</tr>
</tbody>
</table>

[cont...]
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ENGINE FLUSH - GARDX

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PROPYL BENZENE

| ORL | RAT | LD50 | 6040 mg/kg |

Relevant hazards for substance:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspiration hazard</td>
<td>-</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** Nausea and stomach pain may occur. There may be vomiting and diarrhoea.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

**HYDROCARBONS, C11-14, N-ALKANES, ISOALKANES, CYCLIC, <2% AROMATICS**

<table>
<thead>
<tr>
<th>ALGAE</th>
<th>72H IC50</th>
<th>20 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daphnia magna</td>
<td>48H EC50</td>
<td>&gt;250 mg/l</td>
</tr>
<tr>
<td>RAINBOW TROUT (Oncorhynchus mykiss)</td>
<td>96H LC50</td>
<td>&gt;1000 mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable.

12.3. Bioaccumulative potential

**Bioaccumulative potential:** Bioaccumulation potential.

12.4. Mobility in soil

**Mobility:** Insoluble in water. Floats on water. Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

**Transport class:** This product does not require a classification for transport.

[cont...]
Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Section 16: Other information

Other information:

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3:

EUH066: Repeated exposure may cause skin dryness or cracking.

H226: Flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

H411: Toxic to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.