SAFETY DATA SHEET
SINGLE SHOT AIR CO CLEANER

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

1.1. Product identifier

Product name: SINGLE SHOT AIR CO CLEANER
Internal identification: A5176

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

Identified uses: Air Conditioner Treatment

1.3. Details of the supplier of the safety data sheet

Supplier: GARDX INTERNATIONAL LTD
UNIT 7 CLOVELLY BUSINESS PARK
CLOVELLY ROAD
SOUTHBOURNE, EMSWORTH
HANTS
PO10 8PE
+44 (0)1243 376426
product@gardx.co.uk

1.4. Emergency telephone number

Emergency telephone: (24 hrs) +44 (0) 777 8505 330

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards: Aerosol 1 - H222, H229
Health hazards: Not Classified
Environmental hazards: Not Classified

2.2. Label elements

Hazard pictograms

Signal word: Danger

Hazard statements: H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated.

Precautionary statements: 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.
P260 Do not breathe vapour/ spray.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/ container in accordance with local regulations.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.
SINGLE SHOT AIR CO CLEANER

SECTION 3: Composition/information on ingredients

3.2. Mixtures

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
<th>CAS number</th>
<th>EC number</th>
<th>REACH registration number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethyl ether</td>
<td>30-60%</td>
<td>115-10-6</td>
<td>204-065-8</td>
<td>01-2119472128-37-XXXXX</td>
</tr>
<tr>
<td>Ethanol</td>
<td>30-60%</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>01-2119457610-43-XXXXX</td>
</tr>
<tr>
<td>N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine</td>
<td>&lt;1%</td>
<td>2372-82-9</td>
<td>219-145-8</td>
<td>01-2119980592-29-XXXXX</td>
</tr>
</tbody>
</table>

**Classification**
- Flam. Gas 1 - H220
- Press. Gas
- Flam. Liq. 2 - H225
- Eye Irrit. 2 - H319

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

**Inhalation**
If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

**Ingestion**
Rinse mouth thoroughly with water. Get medical attention.

**Skin contact**
Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

**Eye contact**
Rinse immediately with plenty of water. Get medical attention.

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

**Inhalation**
Vapours may cause drowsiness and dizziness.

**Ingestion**
May cause discomfort if swallowed.

**Skin contact**
Product has a defatting effect on skin.

**Eye contact**
Causes serious eye irritation.
SINGLE SHOT AIR CO CLEANER

4.3. Indication of any immediate medical attention and special treatment needed
Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media Extinguish with foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture
Specific hazards Extremely flammable aerosol. 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.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO2). Carbon monoxide (CO).

5.3. Advice for firefighters
Protective actions during firefighting No specific firefighting precautions known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Do not touch or walk into spilled material. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Provide adequate ventilation. Take care as floors and other surfaces may become slippery. Avoid contact with contaminated tools and objects. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions
Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. Provide adequate ventilation. Absorb spillage with inert, damp, non-combustible material. Absorb small quantities with paper towels and evaporate in a safe place. Once evaporation is complete, place paper in a suitable waste disposal container and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections
Reference to other sections For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Usage precautions Avoid contact with skin, eyes and clothing. Do not breathe vapour/spray. Do not expose to temperatures exceeding 50°C/122°F. Do not pierce or burn, even after use. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wear eye protection.

7.2. Conditions for safe storage, including any incompatibilities
SINGLE SHOT AIR CO CLEANER

Storage precautions
Store at temperatures between 4°C and 40°C. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not expose to temperatures exceeding 50°C/122°F.

Storage class
Flammable compressed gas storage.

7.3. 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

Dimethyl ether
Long-term exposure limit (8-hour TWA): WEL 400 ppm 766 mg/m³
Short-term exposure limit (15-minute): WEL 500 ppm 958 mg/m³

ethanol
Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

WEL = Workplace Exposure Limit

Dimethyl ether (CAS: 115-10-6)

DNEL
Workers - Inhalation; Long term systemic effects: 1894 mg/m³
Consumer - Inhalation; Long term systemic effects: 471 mg/m³

PNEC
- Fresh water; 0.155 mg/l
- marine water; 0.016 mg/l
- Intermittent release; 1549 mg/l
- STP; 160 mg/l
- Sediment (Freshwater); 0.681 mg/l
- Sediment (Marine water); 0.069 mg/l
- Soil; 0.045 mg/l

ethanol (CAS: 64-17-5)

DNEL
Workers - Inhalation; Short term : 1900 mg/m³
Workers - Dermal; Long term systemic effects: 343 mg/kg/day
Workers - Inhalation; Long term : 950 mg/m³
Consumer - Inhalation; Short term : 950 mg/m³
Consumer - Dermal; Long term systemic effects: 206 mg/kg/day
Consumer - Inhalation; Long term : 114 mg/m³
Consumer - Oral; Long term systemic effects: 87 mg/kg/day

PNEC
- Fresh water; 0.96 mg/l
- marine water; 0.79 mg/l
- Soil; 0.63 mg/kg
- STP; 580 mg/l
- Sediment (Freshwater); 3.6 mg/kg

8.2. Exposure controls

Protective equipment
## SINGLE SHOT AIR CO CLEANER

### Appropriate engineering controls

Provide adequate ventilation.

### 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: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

### Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. For exposure up to 4 hours, wear gloves made of the following material: Rubber (natural, latex). Nitrile rubber. Neoprene. Polyvinyl chloride (PVC). To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. 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.

### Hygiene measures

Wash hands thoroughly after handling.

## SECTION 9: Physical and chemical properties

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Aerosol.</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless.</td>
</tr>
<tr>
<td>Odour</td>
<td>Fruity.</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Completely soluble in water.</td>
</tr>
</tbody>
</table>

### 9.2. Other information

Not determined.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity**

There are no known reactivity hazards associated with this product.

### 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**

Not determined.

### 10.4. Conditions to avoid

**Conditions to avoid**

Avoid heat, flames and other sources of ignition.

### 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**

Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO2). Carbon monoxide (CO).
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

- **Inhalation**  
  Vapours may cause drowsiness and dizziness.

- **Ingestion**  
  Gastrointestinal symptoms, including upset stomach.

- **Skin contact**  
  Product has a defatting effect on skin.

- **Eye contact**  
  Causes serious eye irritation.

SECTION 12: Ecological information

- **Ecotoxicity**  
  The product is not expected to be toxic to aquatic organisms.

- **12.1. Toxicity**
  - **Acute aquatic toxicity**
    Not determined.

- **12.2. Persistence and degradability**
  - **Persistence and degradability**  
    The product is expected to be biodegradable.

- **12.3. Bioaccumulative potential**
  - **Bioaccumulative potential**  
    The product is not bioaccumulating.

- **12.4. Mobility in soil**
  - **Mobility**  
    The product is soluble in water.

- **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 determined.

SECTION 13: Disposal considerations

- **13.1. Waste treatment methods**
  - **Disposal methods**  
    Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

- **14.1. UN number**
  - **UN No. (ADR/RID)**  
    1950
  - **UN No. (IMDG)**  
    1950
  - **UN No. (ICAO)**  
    1950

- **14.2. UN proper shipping name**
  - **Proper shipping name (ADR/RID)**  
    AEROSOLS
  - **Proper shipping name (IMDG)**  
    AEROSOLS
SINGLE SHOT AIR CO CLEANER

Proper shipping name (ICAO)  AEROSOLS

14.3. Transport hazard class(es)
ADR/RID class  2
IMDG class  2
ICAO class/division  2

Transport labels

14.4. Packing group
ADR/RID packing group  5F

14.5. Environmental hazards
Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user
Tunnel restriction code  (D)

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  Control of Substances Hazardous to Health Regulations 2002 (as amended).
Guidance  Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

SECTION 16: Other information

Revision comments  NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date  10/12/2019
Revision  2.2
Supersedes date  16/06/2016
SDS number  25118
Risk phrases in full  R11 Highly flammable.
R12 Extremely flammable.
SINGLE SHOT AIR CO CLEANER

Hazard statements in full

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: may burst if heated.
H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure.
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.