SAFETY DATA SHEET
Connection Unit with Regulator 1/8in, Part Number CP7998

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

This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.

1.1 Product identifier

<table>
<thead>
<tr>
<th>Product name</th>
<th>Part no. (chemical kit)</th>
<th>Part no.</th>
<th>Product identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Connection Unit with Regulator 1/8in, Part Number CP7998</td>
</tr>
</tbody>
</table>

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

Material uses

<table>
<thead>
<tr>
<th>Material uses</th>
<th>Description</th>
<th>Part no. (chemical kit)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reagents and Standards for Analytical Chemistry Laboratory Use</td>
<td>CP7972 Gas Clean Filter Hydrocarbon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CP17970 Gas Clean Filter Oxygen</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CP17971 Gas Clean Filter Moisture</td>
</tr>
</tbody>
</table>

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

e-mail address of person responsible for this SDS

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)

CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product’s directions for use it may present potential health and safety hazards.

2.1 Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Product definition</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Hydrocarbon</td>
<td>H332 ACUTE TOXICITY (inhalation) - Category 4</td>
</tr>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>H350 CARCINOGENICITY - Category 1A</td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>H400 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1</td>
</tr>
<tr>
<td></td>
<td>H411 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2</td>
</tr>
<tr>
<td></td>
<td>H373 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2</td>
</tr>
</tbody>
</table>

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## SECTION 2: Hazards identification

**Ingredients of unknown toxicity**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage of the mixture consisting of ingredient(s) of unknown toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>&gt; 60%</td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>&gt; 60%</td>
</tr>
</tbody>
</table>

**Ingredients of unknown ecotoxicity**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage of the mixture consisting of ingredient(s) of unknown ecotoxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>100%</td>
</tr>
</tbody>
</table>

See Section 16 for the full text of the H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

#### Hazard pictograms

- **Gas Clean Filter Oxygen**
- **Gas Clean Filter Moisture**

#### Signal word

- **Gas Clean Filter Hydrocarbon**: No signal word.
- **Gas Clean Filter Oxygen**: Danger
- **Gas Clean Filter Moisture**: Warning

#### Hazard statements

- **Gas Clean Filter Hydrocarbon**: No known significant effects or critical hazards.
- **Gas Clean Filter Oxygen**:
  - H332 - Harmful if inhaled.
  - H350 - May cause cancer.
  - H400 - Very toxic to aquatic life.
  - H411 - Toxic to aquatic life with long lasting effects.
- **Gas Clean Filter Moisture**:
  - H373 - May cause damage to organs through prolonged or repeated exposure.

#### Precautionary statements

**Prevention**

- **Gas Clean Filter Hydrocarbon**: Not applicable.
- **Gas Clean Filter Oxygen**:
  - P201 - Obtain special instructions before use.
  - P280 - Wear protective gloves. Wear protective clothing. Wear eye or face protection.
  - P273 - Avoid release to the environment.
- **Gas Clean Filter Moisture**:
  - P260 - Do not breathe dust.

**Response**

- **Gas Clean Filter Hydrocarbon**: Not applicable.
- **Gas Clean Filter Oxygen**:
  - P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
- **Gas Clean Filter Moisture**:
  - P314 - Get medical attention if you feel unwell.

**Storage**

- **Gas Clean Filter Hydrocarbon**: Not applicable.
- **Gas Clean Filter Oxygen**:
  - P405 - Store locked up.
- **Gas Clean Filter Moisture**: Not applicable.

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SECTION 2: Hazards identification

Disposal:
- Gas Clean Filter Hydrocarbon: Not applicable.
- Gas Clean Filter Oxygen: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Gas Clean Filter Moisture: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients:
- Gas Clean Filter Hydrocarbon:
  - manganese dioxide
  - nickel monoxide
- Gas Clean Filter Oxygen:
  - crystalline silica, respirable powder
  - cristobalite
- Gas Clean Filter Moisture:
  - None known.

Supplemental label elements:
- Gas Clean Filter Hydrocarbon: Not applicable.
- Gas Clean Filter Oxygen: Not applicable.
- Gas Clean Filter Moisture: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:
- Gas Clean Filter Hydrocarbon: Not applicable.
- Gas Clean Filter Oxygen: Restricted to professional users.
- Gas Clean Filter Moisture: Not applicable.

Special packaging requirements:
- Tactile warning of danger:
  - Gas Clean Filter Hydrocarbon: Not applicable.
  - Gas Clean Filter Oxygen: Not applicable.
  - Gas Clean Filter Moisture: Not applicable.

2.3 Other hazards:
- Other hazards which do not result in classification:
  - Gas Clean Filter Hydrocarbon: May form explosible dust-air mixture if dispersed.
  - Gas Clean Filter Oxygen: None known.
  - Gas Clean Filter Moisture: None known.

SECTION 3: Composition/information on ingredients

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product's directions for use it may present potential health and safety hazards.

3.1 Substances:
- Gas Clean Filter Hydrocarbon: Mono-constituent substance (encapsulated in article)
- Gas Clean Filter Oxygen: Mixture (encapsulated in article)
- Gas Clean Filter Moisture: Mixture (encapsulated in article)

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>%</th>
<th>Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Hydrocarbon</td>
<td>EC: 231-153-3, CAS: 7440-44-0</td>
<td>100</td>
<td>Not classified.</td>
<td>[A]</td>
</tr>
<tr>
<td>carbon</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>aluminium oxide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper oxide, Activated</td>
<td>EC: 215-269-1, CAS: 1317-38-0</td>
<td>≤10</td>
<td>Aquatic Acute 1, H400 (M=100)</td>
<td>[1]</td>
</tr>
<tr>
<td>Index: 029-016-00-6</td>
<td></td>
<td></td>
<td>Aquatic Chronic 1, H410 (M=1)</td>
<td></td>
</tr>
<tr>
<td>Index: 025-001-00-3</td>
<td></td>
<td></td>
<td>Acute Tox. 4, H332</td>
<td>[2]</td>
</tr>
</tbody>
</table>

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**SECTION 3: Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Index</th>
<th>EC Number</th>
<th>Exposure Limit</th>
<th>H-Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>1313-99-1</td>
<td>028-003-00-2</td>
<td>238-878-4</td>
<td>&lt;10</td>
<td>Carc. 1A, H350i (inhalation), STOT RE 1, H372, Aquatic Chronic 4, H413</td>
</tr>
<tr>
<td>cristobalite</td>
<td>14808-60-7</td>
<td></td>
<td>238-455-4</td>
<td>&lt;10</td>
<td>STOT RE 1, H372 (lungs) (inhalation)</td>
</tr>
<tr>
<td>crystalline silica, respirable powder</td>
<td>14464-46-1</td>
<td></td>
<td></td>
<td></td>
<td>See Section 16 for the full text of the H statements declared above.</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Substance classified with a health or environmental hazard</td>
</tr>
<tr>
<td>2</td>
<td>Substance with a workplace exposure limit</td>
</tr>
<tr>
<td>3</td>
<td>Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII</td>
</tr>
<tr>
<td>4</td>
<td>Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</td>
</tr>
<tr>
<td>5</td>
<td>Substance of equivalent concern</td>
</tr>
<tr>
<td>6</td>
<td>Additional disclosure due to company policy</td>
</tr>
<tr>
<td>A</td>
<td>Constituent</td>
</tr>
<tr>
<td>B</td>
<td>Impurity</td>
</tr>
<tr>
<td>C</td>
<td>Stabilising additive</td>
</tr>
</tbody>
</table>

**SECTION 4: First aid measures**

4.1 Description of first aid measures

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>Inhalation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gas Clean Filter Hydrocarbon</strong></td>
<td><strong>Gas Clean Filter Hydrocarbon</strong></td>
<td>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.</td>
</tr>
<tr>
<td><strong>Gas Clean Filter Oxygen</strong></td>
<td><strong>Gas Clean Filter Oxygen</strong></td>
<td>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.</td>
</tr>
<tr>
<td><strong>Gas Clean Filter Moisture</strong></td>
<td><strong>Gas Clean Filter Moisture</strong></td>
<td>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.</td>
</tr>
</tbody>
</table>

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SECTION 4: First aid measures

Skin contact:
- **Gas Clean Filter Hydrocarbon**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- **Gas Clean Filter Oxygen**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- **Gas Clean Filter Moisture**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion:
- **Gas Clean Filter Hydrocarbon**: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- **Gas Clean Filter Oxygen**: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- **Gas Clean Filter Moisture**: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders:
- **Gas Clean Filter Hydrocarbon**: No action shall be taken involving any personal risk or without suitable training.
- **Gas Clean Filter Oxygen**: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- **Gas Clean Filter Moisture**: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person...
SECTION 4: First aid measures

providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

<table>
<thead>
<tr>
<th>Exposure Pathway</th>
<th>Gas Clean Filter Hydrocarbon</th>
<th>Gas Clean Filter Oxygen</th>
<th>Gas Clean Filter Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

Over-exposure signs/symptoms

<table>
<thead>
<tr>
<th>Exposure Pathway</th>
<th>Gas Clean Filter Hydrocarbon</th>
<th>Gas Clean Filter Oxygen</th>
<th>Gas Clean Filter Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>No specific data.</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Adverse symptoms may include the following: respiratory tract irritation coughing</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No specific data.</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No specific data.</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician

<table>
<thead>
<tr>
<th>Gas Clean Filter Hydrocarbon</th>
<th>Gas Clean Filter Oxygen</th>
<th>Gas Clean Filter Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
<td>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</td>
</tr>
</tbody>
</table>

Specific treatments

<table>
<thead>
<tr>
<th>Gas Clean Filter Hydrocarbon</th>
<th>Gas Clean Filter Oxygen</th>
<th>Gas Clean Filter Moisture</th>
</tr>
</thead>
</table>
SECTION 5: Firefighting measures

5.1 Extinguishing media

**Suitable extinguishing media**:
- Gas Clean Filter Hydrocarbon
- Gas Clean Filter Oxygen
- Gas Clean Filter Moisture

Use dry chemical powder.

Use an extinguishing agent suitable for the surrounding fire.

Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**:
- Gas Clean Filter Hydrocarbon
- Gas Clean Filter Oxygen
- Gas Clean Filter Moisture

Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

None known.

None known.

5.2 Special hazards arising from the substance or mixture

**Hazardous combustion products**:
- Gas Clean Filter Hydrocarbon
- Gas Clean Filter Oxygen
- Gas Clean Filter Moisture

Decomposition products may include the following materials:
- carbon dioxide
- carbon monoxide

Decomposition products may include the following materials:
- metal oxide/oxides

Decomposition products may include the following materials:
- metal oxide/oxides

5.3 Advice for firefighters

**Special precautions for fire-fighters**:
- Gas Clean Filter Hydrocarbon
- Gas Clean Filter Oxygen
- Gas Clean Filter Moisture

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**:
- Gas Clean Filter Hydrocarbon
- Gas Clean Filter Oxygen
- Gas Clean Filter Moisture

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for...
SECTION 5: Firefighting measures

Fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

- **Gas Clean Filter Hydrocarbon**
  - No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.

- **Gas Clean Filter Oxygen**
  - No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

- **Gas Clean Filter Moisture**
  - No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

- **Gas Clean Filter Hydrocarbon**
  - If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- **Gas Clean Filter Oxygen**
  - If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- **Gas Clean Filter Moisture**
  - If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions:

- **Gas Clean Filter Hydrocarbon**
  - Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

- **Gas Clean Filter Oxygen**
  - Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

- **Gas Clean Filter Moisture**
  - Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Date of issue/Date of revision: 11/09/2018
**SECTION 6: Accidental release measures**

<table>
<thead>
<tr>
<th>Methods for cleaning up</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Hydrocarbon</td>
<td>Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.</td>
</tr>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.</td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.</td>
</tr>
</tbody>
</table>

**6.4 Reference to other sections**

- See Section 1 for emergency contact information.
- See Section 8 for information on appropriate personal protective equipment.
- See Section 13 for additional waste treatment information.

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

<table>
<thead>
<tr>
<th>Protective measures</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Hydrocarbon</td>
<td>Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.</td>
</tr>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.</td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advice on general occupational hygiene</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Hydrocarbon</td>
<td>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</td>
</tr>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</td>
</tr>
</tbody>
</table>
SECTION 7: Handling and storage

drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Gas Clean Filter Moisture
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Gas Clean Filter Hydrocarbon
Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Gas Clean Filter Oxygen
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Gas Clean Filter Moisture
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds (in tonnes)

<table>
<thead>
<tr>
<th>Category</th>
<th>Notification and MAPP threshold</th>
<th>Safety report threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>

7.3 Specific end use(s)

Recommendations

Gas Clean Filter Hydrocarbon Industrial applications, Professional applications.
Gas Clean Filter Oxygen Industrial applications, Professional applications.
Gas Clean Filter Moisture Industrial applications, Professional applications.

Date of issue/Date of revision: 11/09/2018
**SECTION 8: Exposure controls/personal protection**

Since the hazardous ingredient in this article is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

### 8.1 Control parameters

#### Occupational exposure limits

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gas Clean Filter Oxygen</strong></td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011).</td>
</tr>
<tr>
<td>aluminium oxide</td>
<td>TWA: 10 mg/m³ 8 hours. Form: inhalable dust</td>
</tr>
<tr>
<td>Manganese dioxide</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011).</td>
</tr>
<tr>
<td>TWA: 0.5 mg/m³, (as Mn) 8 hours.</td>
<td></td>
</tr>
<tr>
<td>TWA: 0.5 mg/m³, (as Ni) 8 hours.</td>
<td></td>
</tr>
<tr>
<td><strong>Gas Clean Filter Moisture</strong></td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011).</td>
</tr>
<tr>
<td>crystalline silica, respirable powder</td>
<td>TWA: 0.1 mg/m³ 8 hours. Form: respirable dust</td>
</tr>
<tr>
<td>cristobalite</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011).</td>
</tr>
<tr>
<td></td>
<td>TWA: 0.1 mg/m³ 8 hours. Form: respirable dust</td>
</tr>
</tbody>
</table>

**Recommended monitoring procedures**

If this product contains ingredients with exposure limits, personal, workplace atmosphere 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. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

No DNELs/DMELs available.

**PNECs**

No PNECs available

### 8.2 Exposure controls

#### Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### Individual protection measures

**Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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**Date of issue/Date of revision**

11/09/2018
SECTION 8: Exposure controls/personal protection

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: Gas Clean Filter Hydrocarbon Solid. [Powder.]
Gas Clean Filter Oxygen Solid. [Granular solid.]
Gas Clean Filter Moisture Solid. [Granular solid.]

Colour: Gas Clean Filter Hydrocarbon Black.
Gas Clean Filter Oxygen Brown. [Dark]
Gas Clean Filter Moisture Tan.

Odour: Gas Clean Filter Hydrocarbon None
Gas Clean Filter Oxygen Not available.
Gas Clean Filter Moisture Not available.

Odour threshold: Gas Clean Filter Hydrocarbon Not available.
Gas Clean Filter Oxygen Not available.
Gas Clean Filter Moisture Not available.
### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Hydrocarbon</th>
<th>Oxygen</th>
<th>Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>pH</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Melting point/freezing point</strong></td>
<td>3652°C</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Closed cup: &gt;535°C</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not applicable.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Hydrocarbon</th>
<th>Oxygen</th>
<th>Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td>** Relative density **</td>
<td>1.9 to 2.2 [Water = 1]</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>** Solubility(ies) **</td>
<td>Insoluble in the following materials: cold water and hot water.</td>
<td>Insoluble in the following materials: cold water and hot water.</td>
<td>Insoluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>** Partition coefficient: n-octanol/water **</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>** Auto-ignition temperature **</td>
<td>452°C</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>** Decomposition temperature **</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>** Viscosity **</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>** Explosive properties **</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>** Oxidising properties **</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

#### 9.2 Other information

No additional information.
SECTION 10: Stability and reactivity

10.1 Reactivity

| Gas Clean Filter Hydrocarbon | No specific test data related to reactivity available for this product or its ingredients. |
| Gas Clean Filter Oxygen | No specific test data related to reactivity available for this product or its ingredients. |
| Gas Clean Filter Moisture | No specific test data related to reactivity available for this product or its ingredients. |

10.2 Chemical stability

| Gas Clean Filter Hydrocarbon | The product is stable. |
| Gas Clean Filter Oxygen | The product is stable. |
| Gas Clean Filter Moisture | The product is stable. |

10.3 Possibility of hazardous reactions

| Gas Clean Filter Hydrocarbon | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| Gas Clean Filter Oxygen | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| Gas Clean Filter Moisture | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

10.4 Conditions to avoid

| Gas Clean Filter Hydrocarbon | Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation. |
| Gas Clean Filter Oxygen | No specific data. |
| Gas Clean Filter Moisture | No specific data. |

10.5 Incompatible materials

| Gas Clean Filter Hydrocarbon | Reactive or incompatible with the following materials: |
| Oxidizing materials | May react or be incompatible with oxidising materials. |
| Gas Clean Filter Oxygen | May react or be incompatible with oxidising materials. |
| Gas Clean Filter Moisture | May react or be incompatible with oxidising materials. |

10.6 Hazardous decomposition products

| Gas Clean Filter Hydrocarbon | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| Gas Clean Filter Oxygen | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| Gas Clean Filter Moisture | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen Copper oxide, Activated</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>470 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Manganese dioxide</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3478 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Nickel monoxide</td>
<td>LC50 Inhalation Dusts and mists</td>
<td>Rat - Male, Female</td>
<td>&gt;5.08 mg/l</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat - Female</td>
<td>9990 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen Oral Inhalation (dusts and mists)</td>
<td>5814 mg/kg 3.166 mg/l</td>
</tr>
</tbody>
</table>

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SECTION 11: Toxicological information

Irritation/Corrosion
Conclusion/Summary: Not available.

Sensitiser
Conclusion/Summary: Not available.

Skin
May cause sensitisation by skin contact.

Mutagenicity
Conclusion/Summary: Not available.

Carcinogenicity
Conclusion/Summary: Not available.

Reproductive toxicity
Conclusion/Summary: Not available.

Teratogenicity
Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)
Not available.

Specific target organ toxicity (repeated exposure)

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>Category 1</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
<tr>
<td>nickel monoxide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>Category 1</td>
<td>Inhalation</td>
<td>lungs</td>
</tr>
<tr>
<td>crystalline silica, respirable powder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cristobalite</td>
<td>Category 1</td>
<td>Inhalation</td>
<td>lungs</td>
</tr>
</tbody>
</table>

Aspiration hazard
Not available.

Information on likely routes of exposure
Gas Clean Filter Oxygen Gas Clean Filter Moisture Routes of entry anticipated: Oral, Dermal, Inhalation.
Gas Clean Filter Oxygen Gas Clean Filter Moisture Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Inhalation
Gas Clean Filter Hydrocarbon Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. Harmful if inhaled.

Gas Clean Filter Oxygen Gas Clean Filter Moisture No known significant effects or critical hazards.

Ingestion
Gas Clean Filter Hydrocarbon No known significant effects or critical hazards.

Gas Clean Filter Oxygen Gas Clean Filter Moisture No known significant effects or critical hazards.

Skin contact
Gas Clean Filter Hydrocarbon No known significant effects or critical hazards.

Gas Clean Filter Oxygen Gas Clean Filter Moisture No known significant effects or critical hazards.

Eye contact
Gas Clean Filter Hydrocarbon Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Gas Clean Filter Oxygen Gas Clean Filter Moisture No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics
### SECTION 11: Toxicological information

#### Inhalation
- **Gas Clean Filter Hydrocarbon**
  - Adverse symptoms may include the following:
    - respiratory tract irritation
    - coughing
- **Gas Clean Filter Oxygen**
  - No specific data.
- **Gas Clean Filter Moisture**
  - No specific data.

#### Ingestion
- **Gas Clean Filter Hydrocarbon**
  - No specific data.
- **Gas Clean Filter Oxygen**
  - No specific data.
- **Gas Clean Filter Moisture**
  - No specific data.

#### Skin contact
- **Gas Clean Filter Hydrocarbon**
  - No specific data.
- **Gas Clean Filter Oxygen**
  - No specific data.
- **Gas Clean Filter Moisture**
  - No specific data.

#### Eye contact
- **Gas Clean Filter Hydrocarbon**
  - Adverse symptoms may include the following:
    - irritation
    - redness
- **Gas Clean Filter Oxygen**
  - No specific data.
- **Gas Clean Filter Moisture**
  - No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<table>
<thead>
<tr>
<th>Exposure Type</th>
<th>Hydrocarbon</th>
<th>Oxygen</th>
<th>Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short term exposure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential immediate effects</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential delayed effects</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Long term exposure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential immediate effects</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential delayed effects</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### General
- **Gas Clean Filter Hydrocarbon**
  - Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- **Gas Clean Filter Oxygen**
  - No known significant effects or critical hazards.
- **Gas Clean Filter Moisture**
  - May cause damage to organs through prolonged or repeated exposure.

### Carcinogenicity
- **Gas Clean Filter Hydrocarbon**
  - No known significant effects or critical hazards.
- **Gas Clean Filter Oxygen**
  - May cause cancer. Risk of cancer depends on duration and level of exposure.
- **Gas Clean Filter Moisture**
  - No known significant effects or critical hazards.

### Mutagenicity
- **Gas Clean Filter Hydrocarbon**
  - No known significant effects or critical hazards.
- **Gas Clean Filter Oxygen**
  - No known significant effects or critical hazards.
- **Gas Clean Filter Moisture**
  - No known significant effects or critical hazards.

### Teratogenicity
- **Gas Clean Filter Hydrocarbon**
  - No known significant effects or critical hazards.
- **Gas Clean Filter Oxygen**
  - No known significant effects or critical hazards.
- **Gas Clean Filter Moisture**
  - No known significant effects or critical hazards.

### Developmental effects
- **Gas Clean Filter Hydrocarbon**
  - No known significant effects or critical hazards.
- **Gas Clean Filter Oxygen**
  - No known significant effects or critical hazards.
- **Gas Clean Filter Moisture**
  - No known significant effects or critical hazards.

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SECTION 11: Toxicological information

Fertility effects:
- Gas Clean Filter Hydrocarbon: No known significant effects or critical hazards.
- Gas Clean Filter Oxygen: No known significant effects or critical hazards.
- Gas Clean Filter Moisture: No known significant effects or critical hazards.

Other information:
- Gas Clean Filter Hydrocarbon: Not available.
- Gas Clean Filter Oxygen: Not available.
- Gas Clean Filter Moisture: Not available.

SECTION 12: Ecological information

12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Hydrocarbon</td>
<td>Acute LC50 1000 mg/l Fresh water</td>
<td>Fish - Danio rerio</td>
<td>96 hours</td>
</tr>
<tr>
<td>Gas Clean Filter Oxygen Copper oxide, Activated</td>
<td>Acute LC50 2.6 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 &gt;56000 ppm Fresh water EC50 &gt;100 mg/l Fresh water</td>
<td>Fish - Gambusia affinis - Adult Algae - Desmodesmus subspicatus</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 &gt;100 mg/l NOEC &gt;100 mg/l</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability
Not available.

12.3 Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen nickel monoxide</td>
<td>-</td>
<td>5613</td>
<td>high</td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

<table>
<thead>
<tr>
<th>Soil/water partition coefficient (K&lt;sub&gt;OC&lt;/sub&gt;)</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

12.5 Results of PBT and vPvB assessment

<table>
<thead>
<tr>
<th>PBT</th>
<th>vPvB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

12.6 Other adverse effects
No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
SECTION 13: Disposal considerations

Methods of disposal: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste: The classification of the product may meet the criteria for a hazardous waste.

Packaging Methods of disposal: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

This Safety Data Sheet is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

ADR/RID / IMDG / IATA: Not regulated.

14.6 Special precautions for user: Transport within user's premises: 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.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV
None of the components are listed.

Substances of very high concern
None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Gas Clean Filter Hydrocarbon: Not applicable.

Gas Clean Filter Oxygen: Restricted to professional users.

Gas Clean Filter Moisture: Not applicable.

Other EU regulations

Ozone depleting substances (1005/2009/EU)
Not listed.

Prior Informed Consent (PIC) (649/2012/EU)
Not listed.

Seveso Directive
This product is controlled under the Seveso Directive.

Danger criteria

Date of issue/Date of revision: 11/09/2018 19/22
Connection Unit with Regulator 1/8in, Part Number CP7998

SECTION 15: Regulatory information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>List name</th>
<th>Name on list</th>
<th>Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen nickel monoxide</td>
<td>UK Occupational Exposure Limits EH40 - WEL</td>
<td>inorganic nickel compounds Insoluble in water Except nickel carbonyl</td>
<td>Carc.</td>
<td>-</td>
</tr>
</tbody>
</table>

International regulations

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol (Annexes A, B, C, E)**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**Inventory list**

- **Australia**: All components are listed or exempted.
- **Canada**: Not determined.
- **China**: All components are listed or exempted.
- **Europe**: All components are listed or exempted.
- **Japan**: Japan inventory (ENCS): All components are listed or exempted. Japan inventory (ISHL): All components are listed or exempted.
- **Malaysia**: All components are listed or exempted.
- **New Zealand**: All components are listed or exempted.
- **Philippines**: Not determined.
- **Republic of Korea**: Not determined.
- **Taiwan**: All components are listed or exempted.
- **Thailand**: Not determined.
- **Turkey**: Not determined.
- **United States**: All components are listed or exempted.
- **Viet Nam**: Not determined.

**15.2 Chemical safety assessment**

This product contains substances for which Chemical Safety Assessments might still be required.

Date of issue/Date of revision: 11/09/2018
Connection Unit with Regulator 1/8in, Part Number CP7998

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms:
- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

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<td>STOT RE 2, H373</td>
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</table>

Full text of abbreviated H statements

Gas Clean Filter Oxygen

- H302: Harmful if swallowed.
- H317: May cause an allergic skin reaction.
- H332: Harmful if inhaled.
- H350: May cause cancer.
- H350i (inhalation): May cause cancer by inhalation.
- H372: Causes damage to organs through prolonged or repeated exposure.
- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.
- H411: Toxic to aquatic life with long lasting effects.
- H413: May cause long lasting harmful effects to aquatic life.

Gas Clean Filter Moisture

- H372 (inhalation): Causes damage to organs through prolonged or repeated exposure if inhaled.
- H373: May cause damage to organs through prolonged or repeated exposure.

Full text of classifications [CLP/GHS]

Gas Clean Filter Oxygen

- Acute Tox. 4, H302: ACUTE TOXICITY (oral) - Category 4
- Acute Tox. 4, H332: ACUTE TOXICITY (inhalation) - Category 4
- Aquatic Acute 1, H400: SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
- Aquatic Chronic 1, H410: LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
- Aquatic Chronic 2, H411: LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
- Aquatic Chronic 4, H413: LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4
- Carc. 1A, H350: CARCINOGENICITY - Category 1A
- Carc. 1A, H350i (inhalation): CARCINOGENICITY (inhalation) - Category 1A
- Skin Sens. 1, H317: SKIN SENSITISATION - Category 1
- STOT RE 1, H372: SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1

Gas Clean Filter Moisture

- STOT RE 1, H372 (inhalation): SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (inhalation) - Category 1
- STOT RE 2, H373: SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

Date of issue/Date of revision: 11/09/2018
SECTION 16: Other information

Date of previous issue : 27/04/2017
Version : 2

Notice to reader

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