SAFETY DATA SHEET

Gas Clean Filter FID Kit 1/8 in, Part Number CP736530

Section 1. Identification

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

Product identifier : Gas Clean Filter FID Kit 1/8 in, Part Number CP736530
Part no. (chemical kit) : CP736530
Part no. : Gas Clean Filter Hydrocarbon CP17972
Gas Clean Filter Oxygen CP17970
Gas Clean Filter Moisture CP17971

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

Material uses : Analytical chemistry.
Gas Clean Filter Oxygen 1 x 200 ml
Gas Clean Filter Moisture 1 x 200 ml
Gas Clean Filter Hydrocarbon 2 x 200 ml

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
679 Springvale Road
Mulgrave
Victoria 3170, Australia
1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) 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.

Classification of the substance or mixture

Gas Clean Filter Oxygen
H332 ACUTE TOXICITY (inhalation) - Category 4
H350 CARCINOGENICITY - Category 1
H373 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
H411 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

Gas Clean Filter Moisture
H350 CARCINOGENICITY - Category 1
H373 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

Percentage of the mixture consisting of ingredient(s)
of unknown acute inhalation toxicity: > 60%
Percentage of the mixture consisting of ingredient(s)
of unknown hazards to the aquatic environment: 100%

GHS label elements
## Section 2. Hazard(s) identification

<table>
<thead>
<tr>
<th>Hazard pictograms</th>
<th>Gas Clean Filter Oxygen</th>
<th>Gas Clean Filter Moisture</th>
</tr>
</thead>
</table>

### Signal word
- Gas Clean Filter Hydrocarbon: No signal word.
- Gas Clean Filter Oxygen: DANGER
- Gas Clean Filter Moisture: DANGER

### 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.
  - H373 - May cause damage to organs through prolonged or repeated exposure.
  - H411 - Toxic to aquatic life with long lasting effects.
- Gas Clean Filter Moisture:
  - H350 - May cause cancer.
  - H373 - May cause damage to organs through prolonged or repeated exposure. (lungs)

### Precautionary statements
#### Prevention
- Gas Clean Filter Hydrocarbon: Not applicable.
- Gas Clean Filter Oxygen:
  - P201 - Obtain special instructions before use.
  - P281 - Use personal protective equipment as required.
  - P273 - Avoid release to the environment.
  - P260 - Do not breathe dust.
- Gas Clean Filter Moisture:
  - P201 - Obtain special instructions before use.
  - P281 - Use personal protective equipment as required.
  - P260 - Do not breathe dust.

#### Response
- Gas Clean Filter Hydrocarbon: Not applicable.
- Gas Clean Filter Oxygen:
  - P391 - Collect spillage.
  - P308 + P313 - IF exposed or concerned: Get medical advice or attention.
- Gas Clean Filter Moisture:
  - P308 + P313 - IF exposed or concerned: Get medical advice or attention.

#### Storage
- Gas Clean Filter Hydrocarbon: Not applicable.
- Gas Clean Filter Oxygen: Not applicable.
- Gas Clean Filter Moisture: Not applicable.

#### 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.

### Supplemental label elements
#### Additional warning phrases
- Gas Clean Filter Hydrocarbon: Not applicable.
- Gas Clean Filter Oxygen: Not applicable.
- Gas Clean Filter Moisture: Not applicable.
Section 2. Hazard(s) identification

Other hazards which do not result in classification:
- Gas Clean Filter Hydrocarbon: May form combustible dust concentrations in air.
- Gas Clean Filter Oxygen: None known.
- Gas Clean Filter Moisture: None known.

Section 3. Composition and ingredient information

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 may it present potential health and safety hazards.

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Gas Clean Filter Hydrocarbon</th>
<th>Gas Clean Filter Oxygen</th>
<th>Gas Clean Filter Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Substance (encapsulated in article)</td>
<td>Mixture (encapsulated in article)</td>
<td>Mixture (encapsulated in article)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Hydrocarbon carbon</td>
<td>100</td>
<td>7440-44-0</td>
</tr>
<tr>
<td>Gas Clean Filter Oxygen aluminium oxide</td>
<td>≥75 - ≤90</td>
<td>1344-28-1</td>
</tr>
<tr>
<td>Copper oxide, Activated</td>
<td>≤10</td>
<td>1317-38-0</td>
</tr>
<tr>
<td>Manganese dioxide</td>
<td>&lt;10</td>
<td>1313-13-9</td>
</tr>
<tr>
<td>nickel monoxide</td>
<td>&lt;1</td>
<td>1313-99-1</td>
</tr>
<tr>
<td>Gas Clean Filter Moisture crystalline silica, respirable powder</td>
<td>&lt;10</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>cristobalite</td>
<td>&lt;10</td>
<td>14464-46-1</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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact:
- Gas Clean Filter Hydrocarbon: 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.
- Gas Clean Filter Oxygen: 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.
- Gas Clean Filter Moisture: 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.

Inhalation:
- Gas Clean Filter Hydrocarbon: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Gas Clean Filter Oxygen: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be
Section 4. First aid measures

dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. 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
Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. 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.

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. 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.

Ingestion
Gas Clean Filter Hydrocarbon
Wash out mouth with water. 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. 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. 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.
Section 4. First aid measures

open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Gas Clean Filter Hydrocarbon</th>
<th>Exposition to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>

**Inhalation**

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

**Skin contact**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Gas Clean Filter Hydrocarbon</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>

**Ingestion**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Gas Clean Filter Hydrocarbon</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>

**Over-exposure signs/symptoms**

| Condition            | Gas Clean Filter Hydrocarbon | Adverse symptoms may include the following:
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin contact</td>
<td>Gas Clean Filter Oxygen</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Gas Clean Filter Oxygen</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

| Condition            | Gas Clean Filter Hydrocarbon | Adverse symptoms may include the following:
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Gas Clean Filter Oxygen</td>
<td>respiratory tract irritation</td>
</tr>
<tr>
<td></td>
<td>Gas Clean Filter Moisture</td>
<td>coughing</td>
</tr>
</tbody>
</table>

| Condition            | Gas Clean Filter Hydrocarbon | Adverse symptoms may include the following:
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin contact</td>
<td>Gas Clean Filter Oxygen</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Gas Clean Filter Oxygen</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Condition</th>
<th>Gas Clean Filter Hydrocarbon</th>
<th>No specific data.</th>
</tr>
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<tbody>
<tr>
<td>Inhalation</td>
<td>Gas Clean Filter Oxygen</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Gas Clean Filter Moisture</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician**

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

**Specific treatments**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Gas Clean Filter Hydrocarbon</th>
<th>No specific treatment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>No specific treatment.</td>
<td></td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>No specific treatment.</td>
<td></td>
</tr>
</tbody>
</table>
Section 4. First aid measures

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. 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.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media
  - Gas Clean Filter Hydrocarbon: Use dry chemical powder.
  - Gas Clean Filter Oxygen: Use an extinguishing agent suitable for the surrounding fire.
  - Gas Clean Filter Moisture: Use an extinguishing agent suitable for the surrounding fire.

- Unsuitable extinguishing media
  - Gas Clean Filter Hydrocarbon: Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.
  - Gas Clean Filter Oxygen: None known.
  - Gas Clean Filter Moisture: None known.

Specific hazards arising from the chemical

- Gas Clean Filter Hydrocarbon: May form explosive dust-air mixture if dispersed.
- Gas Clean Filter Oxygen: This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Gas Clean Filter Moisture: No specific fire or explosion hazard.

Hazardous thermal decomposition products

- Gas Clean Filter Hydrocarbon: Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
- Gas Clean Filter Oxygen: Decomposition products may include the following materials:
  - metal oxide/oxides
- Gas Clean Filter Moisture: Decomposition products may include the following materials:
  - metal oxide/oxides

Special protective actions for fire-fighters

- Gas Clean Filter Hydrocarbon: 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.
- Gas Clean Filter Oxygen: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No
Section 5. Firefighting measures

**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.

**Special protective equipment for fire-fighters**:

- **Gas Clean Filter Hydrocarbon**
  - Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **Gas Clean Filter Oxygen**
  - Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **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.

**Hazchem code**:

- **Gas Clean Filter Hydrocarbon**
  - Not available.
- **Gas Clean Filter Oxygen**
  - 2Z
- **Gas Clean Filter Moisture**
  - Not available.

Section 6. Accidental release measures

**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".

Date of issue/Date of revision: 09/11/2021
Date of previous issue: No previous validation
Version: 1
7/19
Section 6. Accidental release measures

**Environmental precautions**

**Gas Clean Filter Hydrocarbon**
Avoid dispersal of spilt 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 spilt 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 spilt 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).

**Methods and material for containment and cleaning up**

**Methods for cleaning up**

**Gas Clean Filter Hydrocarbon**
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.

**Gas Clean Filter Oxygen**
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.

**Gas Clean Filter Moisture**
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.

Section 7. Handling and storage

**Precautions for safe handling**

**Protective measures**

**Gas Clean Filter Hydrocarbon**
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.

**Gas Clean Filter Oxygen**
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
Section 7. Handling and storage

| Advice on general occupational hygiene | : | Gas Clean Filter Hydrocarbon |
| : | : | 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. |
| : | : | Gas Clean Filter Oxygen |
| : | : | 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. |
| : | : | 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. |

| Conditions for safe storage, including any incompatibilities | : | 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 oxidising 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. 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 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. 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. |
Section 7. Handling and storage

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.

Section 8. Exposure controls and 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.

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gas Clean Filter Oxygen</strong></td>
<td></td>
</tr>
<tr>
<td>aluminium oxide</td>
<td>Safe Work Australia (Australia, 12/2019).</td>
</tr>
<tr>
<td>TWA: 10 mg/m³ 8 hours.</td>
<td>EH40/2005 WELs (United Kingdom (UK), 1/2020).</td>
</tr>
<tr>
<td>Copper oxide, Activated</td>
<td>STEL: 2 mg/m³, (as Cu) 15 minutes. Form:</td>
</tr>
<tr>
<td></td>
<td>Dusts and Mists</td>
</tr>
<tr>
<td></td>
<td>TWA: 1 mg/m³, (as Cu) 8 hours. Form:</td>
</tr>
<tr>
<td></td>
<td>Dusts and Mists</td>
</tr>
<tr>
<td>Manganese dioxide</td>
<td>Safe Work Australia (Australia, 12/2019).</td>
</tr>
<tr>
<td>TWA: 1 mg/m³, (as Mn) 8 hours.</td>
<td>Dust</td>
</tr>
<tr>
<td>nickel monoxide</td>
<td>ACGIH TLV (United States, 1/2021).</td>
</tr>
<tr>
<td>TWA: 0.2 mg/m³, (as Ni) 8 hours.</td>
<td>Inhalable fraction</td>
</tr>
<tr>
<td><strong>Gas Clean Filter Moisture</strong></td>
<td></td>
</tr>
<tr>
<td>crystalline silica, respirable powder</td>
<td>Safe Work Australia (Australia, 12/2019).</td>
</tr>
<tr>
<td>TWA: 0.05 mg/m³ 8 hours.</td>
<td>Respirable dust</td>
</tr>
<tr>
<td>cristobalite</td>
<td>Safe Work Australia (Australia, 12/2019).</td>
</tr>
<tr>
<td>TWA: 0.05 mg/m³ 8 hours.</td>
<td>Respirable dust</td>
</tr>
</tbody>
</table>

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.

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.

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.
Section 8. Exposure controls and 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.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**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.

**pH**
- Gas Clean Filter Hydrocarbon: Not available.
- Gas Clean Filter Oxygen: Not available.
- Gas Clean Filter Moisture: Not available.

**Melting point/freezing point**
- Gas Clean Filter Hydrocarbon: 3652°C (6605.6°F)
- Gas Clean Filter Oxygen: Not available.
- Gas Clean Filter Moisture: Not available.

**Boiling point, initial boiling point, and boiling range**
- Gas Clean Filter Hydrocarbon: Not available.
- Gas Clean Filter Oxygen: Not available.
- Gas Clean Filter Moisture: Not available.
Section 9. Physical and chemical properties and safety characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Gas Clean Filter Hydrocarbon</th>
<th>Gas Clean Filter Oxygen</th>
<th>Gas Clean Filter Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapour pressure</td>
<td>Not applicable.</td>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>Not applicable.</td>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.9 to 2.2</td>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td>Solubility</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 applicable.</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>452°C (845.6°F)</td>
<td>Not applicable.</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable.</td>
<td>Not available.</td>
<td></td>
</tr>
<tr>
<td>Particle characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median particle size</td>
<td>Not available.</td>
<td>Not available.</td>
<td></td>
</tr>
</tbody>
</table>
Section 10. Stability and reactivity

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

Chemical stability:
- Gas Clean Filter Hydrocarbon
- Gas Clean Filter Oxygen
- Gas Clean Filter Moisture
  
  The product is stable.

Possibility of hazardous reactions:
- Gas Clean Filter Hydrocarbon
- Gas Clean Filter Oxygen
- Gas Clean Filter Moisture
  
  Under normal conditions of storage and use, hazardous reactions will not occur.

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.

Incompatible materials:
- Gas Clean Filter Hydrocarbon
  
  Reactive or incompatible with the following materials:
  - oxidising materials

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

Section 11. Toxicological information

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 Hydrocarbon carbon</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;10000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Gas Clean Filter Oxygen aluminium oxide</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>&gt;10000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Copper oxide, Activated</td>
<td>LD50 Dermal</td>
<td>Rat - Male, Female</td>
<td>&gt;2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>470 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision : 09/11/2021  Date of previous issue : No previous validation  Version : 1 13/19
Section 11. Toxicological information

| Manganese dioxide | LD50 Oral LC50 Inhalation Dusts and mists | Rat Rat - Male, Female | 3478 mg/kg >5.08 mg/l | - 4 hours |

**Irritation/Corrosion**
Not available.

**Sensitisation**
Not available.

**Conclusion/Summary**

**Skin**

**Mutagenicity**

**Conclusion/Summary**

**Carcinogenicity**

**Conclusion/Summary**

**Reproductive toxicity**

**Conclusion/Summary**

**Teratogenicity**

**Conclusion/Summary**

**Specific target organ toxicity (single exposure)**
Not available.

**Specific target organ toxicity (repeated exposure)**

<table>
<thead>
<tr>
<th>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>oral, inhalation</td>
<td>-</td>
</tr>
<tr>
<td>Manganese dioxide nickel monoxide</td>
<td>Category 1</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>Category 1</td>
<td>inhalation</td>
<td>lungs</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**

<table>
<thead>
<tr>
<th>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>Not available.</td>
<td>Routes of entry anticipated: Oral, Dermal, Inhalation.</td>
<td></td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>Not available.</td>
<td>Routes of entry anticipated: Oral, Dermal, Inhalation.</td>
<td></td>
</tr>
</tbody>
</table>

**Potential acute health effects**

**Eye contact**

<table>
<thead>
<tr>
<th>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>Not available.</td>
<td>Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.</td>
<td></td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>Not available.</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>

**Inhalation**

<table>
<thead>
<tr>
<th>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>Not available.</td>
<td>Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.</td>
<td></td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>Not available.</td>
<td>Harmful if inhaled.</td>
<td></td>
</tr>
</tbody>
</table>

**Skin contact**

<table>
<thead>
<tr>
<th>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>Not available.</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>Not available.</td>
<td>No known significant effects or critical hazards.</td>
<td></td>
</tr>
</tbody>
</table>
# Section 11. Toxicological information

## Ingestion
- **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.

## Symptoms related to the physical, chemical and toxicological characteristics

### 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.

### 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.

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

## Potential immediate effects
- **Gas Clean Filter Hydrocarbon**: No specific data.
- **Gas Clean Filter Oxygen**: No specific data.
- **Gas Clean Filter Moisture**: No specific data.

## Potential delayed effects
- **Gas Clean Filter Hydrocarbon**: No specific data.
- **Gas Clean Filter Oxygen**: No specific data.
- **Gas Clean Filter Moisture**: No specific data.

## Potential chronic health effects

### General
- **Gas Clean Filter Hydrocarbon**: Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- **Gas Clean Filter Oxygen**: May cause damage to organs through prolonged or repeated exposure.
- **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**: May cause cancer. Risk of cancer depends on duration and level of exposure.

### 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.

### Reproductive toxicity
- **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.
Section 11. Toxicological information

### Numerical measures of toxicity

#### Acute toxicity estimates

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapours) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>2735.1</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>1.6</td>
</tr>
<tr>
<td>Copper oxide, Activated</td>
<td>470</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Manganese dioxide</td>
<td>500</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Other information**: Gas Clean Filter Hydrocarbon Not available.

Gas Clean Filter Oxygen

Adverse symptoms may include the following: May cause skin sensitisation.

Gas Clean Filter Moisture

Not available.

## Section 12. Ecological information

### 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</td>
<td>Acute EC50 114.357 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td>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>Manganese dioxide</td>
<td>Acute LC50 &gt;56000 ppm Fresh water</td>
<td>Fish - Gambusia affinis - Adult</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 &gt;100 mg/l Fresh water</td>
<td>Algae - Desmodesmus subspicatus</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute NOEC &gt;100 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 10 mg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Daphnia - Ceriodaphnia dubia</td>
<td>8 days</td>
</tr>
</tbody>
</table>

### Persistence and degradability

Not available.

### 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>

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)**: Not available.

### Other adverse effects

No known significant effects or critical hazards.
Section 13. Disposal considerations

Disposal methods: 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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.

<table>
<thead>
<tr>
<th>UN number</th>
<th>ADG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN3077</td>
<td></td>
<td></td>
<td>UN3077</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UN proper shipping name</th>
<th>ADG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper oxide, Activated)</td>
<td></td>
<td></td>
<td>Environmentally hazardous substance, solid, n.o.s. (Copper oxide, Activated)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th>ADG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td></td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Packing group</th>
<th>ADG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td></td>
<td></td>
<td>III</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental hazards</th>
<th>ADG</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes.</td>
<td></td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>

Additional information

**ADG**
- The product is not regulated as a dangerous good when transported by road or rail in either an IBC, or in other container types if ≤500 kg. This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- **Hazchem code**: 2Z
- **Special provisions**: 274, 331, 335, 375, AU01

**IMDG**
- This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
- **Emergency schedules**: F-A, S-F
- **Special provisions**: 274, 335, 966, 967, 969

**IATA**
- This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
- **Special provisions**: A97, A158, A179, A197, A215

**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.
Section 14. Transport information

Transport in bulk according to IMO instruments: Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons
Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Clean Filter Oxygen</td>
<td>Restricted hazardous chemical [For abrasive blasting at a concentration of greater than 0.1% as nickel]</td>
</tr>
<tr>
<td>Nickel oxide</td>
<td></td>
</tr>
<tr>
<td>Gas Clean Filter Moisture</td>
<td>Restricted hazardous chemical [For abrasive blasting at a concentration of greater than 1%]</td>
</tr>
<tr>
<td>Quartz (respirable fraction)</td>
<td>Restricted hazardous chemical [For abrasive blasting at a concentration of greater than 1%]</td>
</tr>
<tr>
<td>Cristobalite (respirable fraction)</td>
<td></td>
</tr>
</tbody>
</table>

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals
Not listed.

Montreal Protocol
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

<table>
<thead>
<tr>
<th>Country</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Canada</td>
<td>Not determined.</td>
</tr>
<tr>
<td>China</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Europe</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Japan</td>
<td>Japan inventory (CSCL): All components are listed or exempted. Japan inventory (ISHL): All components are listed or exempted.</td>
</tr>
<tr>
<td>New Zealand</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Philippines</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Taiwan</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Thailand</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Turkey</td>
<td>Not determined.</td>
</tr>
<tr>
<td>United States</td>
<td>All components are active or exempted.</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision: 09/11/2021
Date of previous issue: No previous validation
Version: 1
Section 16. Any other relevant information

History
- **Date of issue/Date of revision**: 09/11/2021
- **Date of previous issue**: No previous validation
- **Version**: 1
- **Key to abbreviations**: 
  - ADG = Australian Dangerous Goods
  - ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
  - ATE = Acute Toxicity Estimate
  - BCF = Bioconcentration Factor
  - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
  - IATA = International Air Transport Association
  - IBC = Intermediate Bulk Container
  - IMDG = International Maritime Dangerous Goods
  - LogPow = logarithm of the octanol/water partition coefficient
  - N/A = Not available
  - SUSMP = Standard Uniform Schedule of Medicine and Poisons
  - UN = United Nations

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gas Clean Filter Oxygen</strong></td>
<td></td>
</tr>
<tr>
<td>ACUTE TOXICITY (inhalation) - Category 4</td>
<td>Calculation method</td>
</tr>
<tr>
<td>CARCINOGENICITY - Category 1</td>
<td>Calculation method</td>
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<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2</td>
<td>Calculation method</td>
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<tr>
<td>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2</td>
<td>Calculation method</td>
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<tr>
<td><strong>Gas Clean Filter Moisture</strong></td>
<td></td>
</tr>
<tr>
<td>CARCINOGENICITY - Category 1</td>
<td>Calculation method</td>
</tr>
<tr>
<td>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2</td>
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</tr>
</tbody>
</table>

References
- Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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