Conforms to US OSHA Hazard Communication 29CFR1910.1200

# SAFETY DATA SHEET

Agilent Technologies

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.**

### 1.1 Product identifier

**Product name** : 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 |

**Validation date** : 3/13/2024

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

**Identified uses** : Analytical chemistry.

| | |
|---|---|
| Gas Clean Filter Hydrocarbon | 2 x 200 ml |
| Gas Clean Filter Oxygen | 1 x 200 ml |
| Gas Clean Filter Moisture | 1 x 200 ml |

### 1.3 Details of the supplier of the safety data sheet

**Supplier/Manufacturer** : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

### 1.4 Emergency telephone number

**In case of emergency** : CHEMTREC®: 1-800-424-9300

## 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

**OSHA/HCS status** :

| | |
|---|---|
| Gas Clean Filter Hydrocarbon | While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. |
| Gas Clean Filter Oxygen | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
| Gas Clean Filter Moisture | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |

### Classification of the substance or mixture

**Gas Clean Filter Oxygen**

| | |
|---|---|
| H332 | ACUTE TOXICITY (inhalation) - Category 4 |
| H317 | SKIN SENSITIZATION - Category 1 |
| H350 | CARCINOGENICITY - Category 1A |
| H373 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |
| H400 | AQUATIC HAZARD (ACUTE) - Category 1 |
| H411 | AQUATIC HAZARD (LONG-TERM) - Category 2 |

# Section 2. Hazards identification

**Gas Clean Filter Moisture**

H350 CARCINOGENICITY - Category 1A
H372 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

**Ingredients of unknown toxicity** :

Gas Clean Filter Oxygen — Percentage of the mixture consisting of ingredient (s) of unknown acute inhalation toxicity: > 60%

Gas Clean Filter Moisture — Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 100%

## 2.2 GHS 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 — Danger

**Hazard statements** :

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

Gas Clean Filter Oxygen
H317 - May cause an allergic skin reaction.
H332 - Harmful if inhaled.
H350 - May cause cancer.
H373 - May cause damage to organs through prolonged or repeated exposure. (brain)
H400 - Very toxic to aquatic life.
H411 - Toxic to aquatic life with long lasting effects.

Gas Clean Filter Moisture
H350 - May cause cancer.
H372 - Causes 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.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P273 - Avoid release to the environment.
P260 - Do not breathe dust.

Gas Clean Filter Moisture
P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P260 - Do not breathe dust.
P270 - Do not eat, drink or smoke when using this product.

**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.
P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.
P363 - Wash contaminated clothing before reuse.
P302 + P352 - IF ON SKIN: Wash with plenty of water.

# Section 2. Hazards identification

| | | | |
|---|---|---|---|
| | | | P333 + P313 - If skin irritation or rash occurs: 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** | : | Gas Clean Filter Hydrocarbon | None known. |
| | | Gas Clean Filter Oxygen | None known. |
| | | Gas Clean Filter Moisture | None known. |

**2.3 Other hazards**

| | | | |
|---|---|---|---|
| **Hazards not otherwise classified** | : | Gas Clean Filter Hydrocarbon | None known. |
| | | 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.**

| | | | |
|---|---|---|---|
| **Substance/mixture** | : | Gas Clean Filter Hydrocarbon | Substance (encapsulated in article) |
| | | Gas Clean Filter Oxygen | Mixture (encapsulated in article) |
| | | Gas Clean Filter Moisture | Mixture (encapsulated in article) |

| Ingredient name | % | CAS number |
|---|---|---|
| **Gas Clean Filter Hydrocarbon** | | |
| carbon | 100 | 7440-44-0 |
| **Gas Clean Filter Oxygen** | | |
| Copper oxide, Activated | ≤10 | 1317-38-0 |
| Manganese dioxide | ≤10 | 1313-13-9 |
| nickel monoxide | <1 | 1313-99-1 |
| **Gas Clean Filter Moisture** | | |
| crystalline silica, respirable powder | ≤10 | 14808-60-7 |
| cristobalite | ≤10 | 14464-46-1 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.**

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

# Section 4. First aid measures

## 4.1 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 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 | Wash with plenty of soap and 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. In the event of any complaints or symptoms, avoid further exposure. 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 |

# Section 4. First aid measures

| | | | |
|---|---|---|---|
| | | | 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. |

## 4.2 Most important symptoms/effects, acute and delayed

### Potential acute health effects

| | | | |
|---|---|---|---|
| **Eye contact** | : | 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. |
| **Inhalation** | : | Gas Clean Filter Hydrocarbon | No known significant effects or critical hazards. |
| | | Gas Clean Filter Oxygen | Harmful if inhaled. |
| | | 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 | May cause an allergic skin reaction. |
| | | 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 | No known significant effects or critical hazards. |
| | | Gas Clean Filter Moisture | No known significant effects or critical hazards. |

### Over-exposure signs/symptoms

| | | | |
|---|---|---|---|
| **Eye contact** | : | Gas Clean Filter Hydrocarbon | No specific data. |
| | | Gas Clean Filter Oxygen | No specific data. |
| | | Gas Clean Filter Moisture | No specific data. |
| **Inhalation** | : | Gas Clean Filter Hydrocarbon | No specific data. |
| | | Gas Clean Filter Oxygen | No specific data. |
| | | Gas Clean Filter Moisture | No specific data. |

# Section 4. First aid measures

| | | | |
|---|---|---|---|
| **Skin contact** | : | Gas Clean Filter Hydrocarbon | No specific data. |
| | | Gas Clean Filter Oxygen | Adverse symptoms may include the following:<br>irritation<br>redness |
| | | 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. |

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

| | | | |
|---|---|---|---|
| **Notes to physician** | : | Gas Clean Filter Hydrocarbon | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | | Gas Clean Filter Oxygen | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | | Gas Clean Filter Moisture | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| **Specific treatments** | : | Gas Clean Filter Hydrocarbon | No specific treatment. |
| | | Gas Clean Filter Oxygen | No specific treatment. |
| | | Gas Clean Filter Moisture | No specific treatment. |
| **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. Fire-fighting measures

## 5.1 Extinguishing media

| | | | |
|---|---|---|---|
| **Suitable extinguishing media** | : | Gas Clean Filter Hydrocarbon | Use an extinguishing agent suitable for the surrounding fire. |
| | | 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 | None known. |
| | | Gas Clean Filter Oxygen | None known. |
| | | Gas Clean Filter Moisture | None known. |

## 5.2 Special hazards arising from the substance or mixture

# Section 5. Fire-fighting measures

| | | | |
|---|---|---|---|
| **Specific hazards arising from the chemical** | : | Gas Clean Filter Hydrocarbon | No specific fire or explosion hazard. |
| | | Gas Clean Filter Oxygen | This material is very toxic to aquatic life. 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:<br>carbon dioxide<br>carbon monoxide |
| | | Gas Clean Filter Oxygen | Decomposition products may include the following materials:<br>metal oxide/oxides |
| | | Gas Clean Filter Moisture | Decomposition products may include the following materials:<br>metal oxide/oxides |

## 5.3 Advice for firefighters

| | | | |
|---|---|---|---|
| **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. |
| | | Gas Clean Filter Oxygen | 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. |
| | | 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. |

# 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 spilled material. 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 spilled material. Provide adequate ventilation. Wear appropriate respirator |

# Section 6. Accidental release measures

| | | |
|---|---|---|
| | | 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 spilled 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 specialized 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 specialized 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 specialized 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 spilled 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 spilled 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 spilled 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 materials for containment and cleaning up**

| | | |
|---|---|---|
| **Methods for cleaning up** : | Gas Clean Filter Hydrocarbon | Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled 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

## 7.1 Precautions for safe handling

| | | | |
|---|---|---|---|
| **Protective measures** | : | Gas Clean Filter Hydrocarbon | Put on appropriate personal protective equipment (see Section 8). |
| | | Gas Clean Filter Oxygen | Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. 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. |
| | | Gas Clean Filter Moisture | 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. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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. |
| **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. |

# Section 7. Handling and storage

| | | | |
|---|---|---|---|
| **7.2 Conditions for safe storage, including any incompatibilities** | : | Gas Clean Filter Hydrocarbon | 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 unlabeled 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 unlabeled 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. |

**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. |
| **Industrial sector specific solutions** | : | Gas Clean Filter Hydrocarbon | Not available. |
| | | Gas Clean Filter Oxygen | Not available. |
| | | Gas Clean Filter Moisture | Not available. |

# 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**

# Section 8. Exposure controls/personal protection

| Ingredient name | Exposure limits |
|---|---|
| **Gas Clean Filter Hydrocarbon** | |
| carbon | None. |
| **Gas Clean Filter Oxygen** | |
| Copper oxide, Activated | **NIOSH REL (United States, 10/2020). [COPPER FUME]**<br>TWA: 0.1 mg/m³, (as Cu) 10 hours. Form: Fume<br>**OSHA PEL 1989 (United States, 3/1989). [Copper Fume (as Cu)]**<br>TWA: 0.1 mg/m³, (as Cu) 8 hours. Form: Fume<br>**ACGIH TLV (United States, 1/2023). [copper fume]**<br>TWA: 0.2 mg/m³ 8 hours. Form: Fume<br>**CAL OSHA PEL (United States, 5/2018). [copper salts]**<br>TWA: 1 mg/m³, (as Cu) 8 hours. Form: dust and mist |
| Manganese dioxide | **OSHA PEL 1989 (United States, 3/1989). [Manganese compounds (as Mn)]**<br>CEIL: 5 mg/m³, (as Mn)<br>**OSHA PEL (United States, 5/2018). [Manganese compounds]**<br>CEIL: 5 mg/m³, (as Mn)<br>**NIOSH REL (United States, 10/2020). [manganese compounds and fume]**<br>TWA: 1 mg/m³, (as Mn) 10 hours. Form: Fume<br>STEL: 3 mg/m³, (as Mn) 15 minutes. Form: Fume<br>**OSHA PEL 1989 (United States, 3/1989). [Manganese fume]**<br>TWA: 1 mg/m³, (as Mn) 8 hours. Form: Fume<br>STEL: 3 mg/m³, (as Mn) 15 minutes. Form: Fume<br>**ACGIH TLV (United States, 1/2023). [Manganese and inorganic compounds]**<br>TWA: 0.1 mg/m³, (as Mn) 8 hours. Form: Inhalable fraction<br>TWA: 0.02 mg/m³, (as Mn) 8 hours. Form: Respirable fraction<br>**CAL OSHA PEL (United States, 5/2018). [manganese and compounds]**<br>TWA: 0.2 mg/m³, (as Mn) 8 hours. |
| nickel monoxide | **OSHA PEL 1989 (United States, 3/1989). [Nickel, metal and insoluble compounds (as Ni)]**<br>TWA: 1 mg/m³, (as Ni) 8 hours.<br>**ACGIH TLV (United States, 1/2023). [Nickel, insoluble inorganic compounds]**<br>TWA: 0.2 mg/m³, (as Ni) 8 hours. Form: Inhalable fraction<br>**NIOSH REL (United States, 10/2020). [nickel metal and other compounds]**<br>TWA: 0.015 mg/m³, (as Ni) 10 hours. |

## Section 8. Exposure controls/personal protection

| | |
|---|---|
| | **OSHA PEL (United States, 5/2018). [Nickel, metal and insoluble compounds]**<br>TWA: 1 mg/m³, (as Ni) 8 hours.<br>**CAL OSHA PEL (United States, 5/2018). [nickel, insoluble compounds]**<br>TWA: 0.1 mg/m³, (as Ni) 8 hours. |
| **Gas Clean Filter Moisture** | |
| crystalline silica, respirable powder | **CAL OSHA PEL (United States, 5/2018).**<br>TWA: 0.05 mg/m³ 8 hours.<br>**OSHA PEL Z3 (United States, 6/2016).**<br>TWA: 250 mppcf / $(\%SiO_2+5)$ 8 hours. Form: Respirable<br>TWA: 10 mg/m³ / $(\%SiO_2+2)$ 8 hours. Form: Respirable<br>**OSHA PEL 1989 (United States, 3/1989).**<br>TWA: 0.1 mg/m³, (as quartz) 8 hours. Form: Respirable dust<br>**OSHA PEL (United States, 5/2018). [Silica, crystalline]**<br>TWA: 50 µg/m³ 8 hours. Form: Respirable dust<br>**ACGIH TLV (United States, 1/2023). [Silica, crystalline]**<br>TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction<br>**NIOSH REL (United States, 10/2020). [SILICA, CRYSTALLINE]**<br>TWA: 0.05 mg/m³ 10 hours. Form: respirable dust |
| cristobalite | **OSHA PEL Z3 (United States, 6/2016).**<br>TWA: 250 mppcf / 2 x $(\%SiO_2+5)$ 8 hours. Form: Respirable<br>TWA: 10 mg/m³ / 2 x $(\%SiO_2+2)$ 8 hours. Form: Respirable<br>TWA: 30 mg/m³ / 2 x $(\%SiO_2+2)$ 8 hours. Form: Total dust<br>**OSHA PEL 1989 (United States, 3/1989).**<br>TWA: 0.05 mg/m³, (as quartz) 8 hours. Form: Respirable dust<br>**OSHA PEL (United States, 5/2018). [Silica, crystalline]**<br>TWA: 50 µg/m³ 8 hours. Form: Respirable dust<br>**ACGIH TLV (United States, 1/2023). [Silica, crystalline]**<br>TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction<br>**NIOSH REL (United States, 10/2020). [SILICA, CRYSTALLINE]**<br>TWA: 0.05 mg/m³ 10 hours. Form: respirable dust<br>**CAL OSHA PEL (United States, 5/2018).**<br>TWA: 0.05 mg/m³ 8 hours. Form: respirable dust |

**Biological exposure indices**

# Section 8. Exposure controls/personal protection

| Ingredient name | Exposure indices |
| --- | --- |
| **Gas Clean Filter Oxygen**<br><br>nickel monoxide | **ACGIH BEI (United States, 1/2023) [nickel and inorganic compounds]**<br>BEI: 30 µg/l, nickel [in urine after exposure to soluble compounds]. Sampling time: post-shift at end of workweek.<br>BEI: 5 µg/l, nickel [in urine after exposure to elemental nickel and poorly soluble compounds]. Sampling time: post-shift at end of workweek. |

## 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.

**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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**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. [Granular solid.]
Gas Clean Filter Oxygen — Solid. [Granular solid.]
Gas Clean Filter Moisture — Solid. [Granular solid.]

**Color** :
Gas Clean Filter Hydrocarbon — Black.
Gas Clean Filter Oxygen — Brown. [Dark]
Gas Clean Filter Moisture — Tan.

**Odor** :
Gas Clean Filter Hydrocarbon — None
Gas Clean Filter Oxygen — Not available.
Gas Clean Filter Moisture — Not available.

**Odor 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.

**Flash point** :
Gas Clean Filter Hydrocarbon — Not applicable.
Gas Clean Filter Oxygen — Not applicable.
Gas Clean Filter Moisture — Closed cup: >535°C (>995°F)

**Evaporation rate** :
Gas Clean Filter Hydrocarbon — Not applicable.
Gas Clean Filter Oxygen — Not available.
Gas Clean Filter Moisture — Not available.

**Flammability** :
Gas Clean Filter Hydrocarbon — Not available.
Gas Clean Filter Oxygen — Not available.
Gas Clean Filter Moisture — Not available.

**Lower and upper explosion limit/flammability limit** :
Gas Clean Filter Hydrocarbon — Not applicable.
Gas Clean Filter Oxygen — Not applicable.
Gas Clean Filter Moisture — Not applicable.

**Vapor pressure** :
Gas Clean Filter Hydrocarbon — Not applicable.

**Relative vapor density** :
Gas Clean Filter Hydrocarbon — Not applicable.
Gas Clean Filter Oxygen — Not applicable.
Gas Clean Filter Moisture — Not applicable.

**Relative density** :
Gas Clean Filter Hydrocarbon — 1.9 to 2.2
Gas Clean Filter Oxygen — Not available.
Gas Clean Filter Moisture — Not available.

**Solubility(ies)** :

| Media | Result |
|---|---|
| **Gas Clean Filter Hydrocarbon** | |
| water | Insoluble |
| **Gas Clean Filter Oxygen** | |
| water | Soluble |
| **Gas Clean Filter Moisture** | |
| water | Soluble |

**Partition coefficient: n-octanol/water** :
Gas Clean Filter Hydrocarbon — Not applicable.
Gas Clean Filter Oxygen — Not applicable.
Gas Clean Filter Moisture — Not applicable.

## Section 9. Physical and chemical properties and safety characteristics

| | | | |
|---|---|---|---|
| **Auto-ignition temperature** | : | Gas Clean Filter Hydrocarbon | 452°C (845.6°F) |
| | | Gas Clean Filter Oxygen | Not applicable. |
| | | Gas Clean Filter Moisture | Not applicable. |
| **Decomposition temperature** | : | Gas Clean Filter Hydrocarbon | Not available. |
| | | Gas Clean Filter Oxygen | Not available. |
| | | Gas Clean Filter Moisture | Not available. |
| **Viscosity** | : | Gas Clean Filter Hydrocarbon | Not applicable. |
| | | Gas Clean Filter Oxygen | Not applicable. |
| | | Gas Clean Filter Moisture | Not applicable. |
| **Particle characteristics** | | | |
| **Median particle size** | : | Gas Clean Filter Hydrocarbon | Not available. |
| | | Gas Clean Filter Oxygen | Not available. |
| | | Gas Clean Filter Moisture | Not available. |

## 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 reactions will not occur. |
| | | Gas Clean Filter Oxygen | Under normal conditions of storage and use, hazardous reactions will not occur. |
| | | Gas Clean Filter Moisture | Under normal conditions of storage and use, hazardous reactions will not occur. |
| **10.4 Conditions to avoid** | : | Gas Clean Filter Hydrocarbon | No specific data. |
| | | Gas Clean Filter Oxygen | No specific data. |
| | | Gas Clean Filter Moisture | No specific data. |
| **10.5 Incompatible materials** | : | Gas Clean Filter Hydrocarbon | May react or be incompatible with oxidizing materials. |
| | | Gas Clean Filter Oxygen | May react or be incompatible with oxidizing materials. |
| | | Gas Clean Filter Moisture | May react or be incompatible with oxidizing 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

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| **Gas Clean Filter Hydrocarbon** | | | | |
| carbon | LD50 Oral | Rat | >10000 mg/kg | - |
| **Gas Clean Filter Oxygen** | | | | |
| Copper oxide, Activated | LD50 Dermal | Rat - Male, Female | >2000 mg/kg | - |
| | LD50 Oral | Rat | 470 mg/kg | - |
| Manganese dioxide | LD50 Oral | Rat | 3478 mg/kg | - |
| nickel monoxide | LC50 Inhalation Dusts and mists | Rat - Male, Female | >5.08 mg/l | 4 hours |

### Irritation/Corrosion

Not available.

### Sensitization

Not available.

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Classification

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| **Gas Clean Filter Oxygen** | | | |
| nickel monoxide | - | 1 | Known to be a human carcinogen. |
| **Gas Clean Filter Moisture** | | | |
| crystalline silica, respirable powder | + | 1 | Known to be a human carcinogen. |
| cristobalite | + | 1 | Known to be a human carcinogen. |

### 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)

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| **Gas Clean Filter Oxygen** | | | |
| Manganese dioxide | Category 2 | inhalation | brain |
| nickel monoxide | Category 1 | inhalation | lungs |
| **Gas Clean Filter Moisture** | | | |
| crystalline silica, respirable powder | Category 1 | inhalation | lungs |
| cristobalite | Category 1 | inhalation | lungs |

### Aspiration hazard

Not available.

# Section 11. Toxicological information

| | | | |
|---|---|---|---|
| **Information on the likely routes of exposure** | : | Gas Clean Filter Hydrocarbon | Not available. |
| | | Gas Clean Filter Oxygen | Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. |
| | | Gas Clean Filter Moisture | Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. |

**Potential acute health effects**

| | | | |
|---|---|---|---|
| **Eye contact** | : | 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. |
| **Inhalation** | : | Gas Clean Filter Hydrocarbon | No known significant effects or critical hazards. |
| | | Gas Clean Filter Oxygen | Harmful if inhaled. |
| | | 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 | May cause an allergic skin reaction. |
| | | 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 | 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 | No specific data. |
| | | Gas Clean Filter Oxygen | No specific data. |
| | | Gas Clean Filter Moisture | No specific data. |
| **Inhalation** | : | 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 | Adverse symptoms may include the following:<br>irritation<br>redness |
| | | 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. |

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

| | | |
|---|---|---|
| **Potential immediate effects** | : | Not available. |
| **Potential delayed effects** | : | Not available. |

**Long term exposure**

| | | |
|---|---|---|
| **Potential immediate effects** | : | Not available. |
| **Potential delayed effects** | : | Not available. |

**Potential chronic health effects**

| | | | |
|---|---|---|---|
| **General** | : | Gas Clean Filter Hydrocarbon | No known significant effects or critical hazards. |
| | | Gas Clean Filter Oxygen | May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| | | Gas Clean Filter Moisture | Causes damage to organs through prolonged or repeated exposure. |

# Section 11. Toxicological information

| | | | |
|---|---|---|---|
| **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. |

## Numerical measures of toxicity

### Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| **Gas Clean Filter Oxygen** | | | | | |
| Gas Clean Filter Oxygen | 4579.9 | 27472.5 | N/A | N/A | 1.6 |
| Copper oxide, Activated | 470 | 2500 | N/A | N/A | N/A |
| Manganese dioxide | 3478 | N/A | N/A | N/A | 1.5 |

**Other information** : Gas Clean Filter Oxygen — Adverse symptoms may include the following: pulmonary fibrosis (dust). May cause skin sensitization.

# Section 12. Ecological information

## 12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| **Gas Clean Filter Hydrocarbon** | | | |
| carbon | Acute LC50 1000 mg/l Fresh water | Fish - *Danio rerio* | 96 hours |
| **Gas Clean Filter Oxygen** | | | |
| Copper oxide, Activated | Acute LC50 2.6 mg/l Fresh water | Daphnia - *Daphnia magna* - Neonate | 48 hours |
| | Acute LC50 >56000 ppm Fresh water | Fish - *Gambusia affinis* - Adult | 96 hours |
| Manganese dioxide | Acute EC50 >100 mg/l Fresh water | Algae - *Desmodesmus subspicatus* | 72 hours |
| | Acute EC50 >100 mg/l Fresh water | Daphnia - *Daphnia magna* | 48 hours |
| | Acute LC50 >100 mg/l Fresh water | Fish - *Oncorhynchus mykiss* | 96 hours |
| | Acute NOEC >100 mg/l Fresh water | Fish - *Oncorhynchus mykiss* | 96 hours |
| | Chronic NOEC 10 mg/l Fresh water | Daphnia - *Ceriodaphnia dubia* | 8 days |

## 12.2 Persistence and degradability

Not available.

## 12.3 Bioaccumulative potential

# Section 12. Ecological information

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| **Gas Clean Filter Oxygen** nickel monoxide | - | 5613 | High |

### 12.4 Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**12.5 Other adverse effects** : No known significant effects or critical hazards.

# Section 13. Disposal considerations

### 13.1 Waste treatment methods

**Disposal methods** : The generation of waste should be avoided or minimized 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

**Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.**

**The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.**

**Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.**

# 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.**

**DOT / TDG / Mexico / IMDG / IATA** : Not regulated.

**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.

**Transport in bulk according to IMO instruments** : Not available.

# Section 15. Regulatory information

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

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

**Clean Water Act (CWA) 307**: Copper oxide, Activated; nickel monoxide

**Clean Water Act (CWA) 311**: Sulphuric acid

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

| Name | % | EHS | SARA 302 TPQ (lbs) | SARA 302 TPQ (gallons) | SARA 304 RQ (lbs) | SARA 304 RQ (gallons) |
|---|---|---|---|---|---|---|
| **Gas Clean Filter Oxygen**<br>Sulphuric acid | ≤0.1 | Yes. | 1000 | 66.3 | 1000 | 66.3 |

**SARA 304 RQ** : 6000000 lbs / 2724000 kg

### SARA 311/312

**Classification** :

| | |
|---|---|
| Gas Clean Filter Hydrocarbon | Not applicable. |
| Gas Clean Filter Oxygen | ACUTE TOXICITY (inhalation) - Category 4<br>SKIN SENSITIZATION - Category 1<br>CARCINOGENICITY - Category 1A<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |
| Gas Clean Filter Moisture | CARCINOGENICITY - Category 1A<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |

#### Composition/information on ingredients

| Name | % | Classification |
|---|---|---|
| **Gas Clean Filter Hydrocarbon** | | |
| carbon | 100 | COMBUSTIBLE DUSTS |
| **Gas Clean Filter Oxygen** | | |
| Copper oxide, Activated | ≤10 | ACUTE TOXICITY (oral) - Category 4 |
| Manganese dioxide | ≤10 | OXIDIZING SOLIDS - Category 3<br>ACUTE TOXICITY (inhalation) - Category 4<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |
| nickel monoxide | <1 | SKIN SENSITIZATION - Category 1<br>CARCINOGENICITY - Category 1A<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |
| **Gas Clean Filter Moisture** | | |
| crystalline silica, respirable powder | ≤10 | CARCINOGENICITY - Category 1A<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |
| cristobalite | ≤10 | CARCINOGENICITY - Category 1A<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 |

### SARA 313

# Section 15. Regulatory information

| | Product name | CAS number | % |
|---|---|---|---|
| **Form R - Reporting requirements** | **Gas Clean Filter Oxygen**<br>Copper oxide, Activated<br>Manganese dioxide<br>nickel monoxide | <br>1317-38-0<br>1313-13-9<br>1313-99-1 | <br>≤10<br>≤10<br><1 |
| **Supplier notification** | **Gas Clean Filter Oxygen**<br>Copper oxide, Activated<br>Manganese dioxide<br>nickel monoxide | <br>1317-38-0<br>1313-13-9<br>1313-99-1 | <br>≤10<br>≤10<br><1 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

## State regulations

**Massachusetts** : The following components are listed: ALUMINUM OXIDE; SILICA, CRYSTALLINE, QUARTZ; CRISTOBALITE DUST

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: ALUMINUM OXIDE; COPPER compounds; SILICA, QUARTZ; SILICA, CRISTOBALITE; NICKEL OXIDE

**Pennsylvania** : The following components are listed: ALUMINUM OXIDE; COPPER COMPOUNDS; QUARTZ DUST; CRISTOBALITE DUST; MANGANESE COMPOUNDS

## California Prop. 65

⚠ **WARNING**: This product can expose you to chemicals including Silica, crystalline, Silica, crystalline, Nickel oxide and Strong inorganic acid mists containing sulfuric acid, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

| Ingredient name | No significant risk level | Maximum acceptable dosage level |
|---|---|---|
| **Gas Clean Filter Oxygen**<br>Nickel oxide<br>Strong inorganic acid mists containing sulfuric acid<br><br>**Gas Clean Filter Moisture**<br>Silica, crystalline<br>Silica, crystalline | <br>-<br>-<br><br><br>-<br>- | <br>-<br>-<br><br><br>-<br>- |

## 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

**Australia** : All components are listed or exempted.

**Canada** : Not determined.

# Section 15. Regulatory information

**China** : All components are listed or exempted.

**Japan** : **Japan inventory (CSCL)**: All components are listed or exempted.
**Japan inventory (ISHL)**: 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** : All components are listed or exempted.

**Turkey** : Not determined.

**United States** : All components are active or exempted.

**Viet Nam** : Not determined.

# Section 16. Other information

**Procedure used to derive the classification**

| Classification | Justification |
|---|---|
| **Gas Clean Filter Oxygen** | |
| ACUTE TOXICITY (inhalation) - Category 4 | Calculation method |
| SKIN SENSITIZATION - Category 1 | Calculation method |
| CARCINOGENICITY - Category 1A | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 | Calculation method |
| AQUATIC HAZARD (ACUTE) - Category 1 | Calculation method |
| AQUATIC HAZARD (LONG-TERM) - Category 2 | Calculation method |
| **Gas Clean Filter Moisture** | |
| CARCINOGENICITY - Category 1A | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 | Calculation method |

**History**

**Date of issue/Date of revision** : 03/13/2024

**Date of previous issue** : 11/09/2021

**Version** : 6

**Key to abbreviations** : 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
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
UN = United Nations

**Indicates information that has changed from previously issued version.**

**Notice to reader**

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