



## Section 2. Hazards identification



### Gas Clean Filter Moisture

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

<b>Ingredients of unknown toxicity</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Oxygen	Percentage of the mixture consisting of ingredient (s) of unknown dermal toxicity: 10 - 30% Percentage of the mixture consisting of ingredient (s) of unknown inhalation toxicity: > 60%
	Gas Clean Filter Moisture	Percentage of the mixture consisting of ingredient (s) of unknown dermal toxicity: > 60% Percentage of the mixture consisting of ingredient (s) of unknown inhalation toxicity: > 60% Percentage of the mixture consisting of ingredient (s) of unknown oral toxicity: > 60%
	<input checked="" type="checkbox"/> 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

: <input checked="" type="checkbox"/> Gas Clean Filter Oxygen	
Gas Clean Filter Moisture	

#### Signal word

: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Warning Danger Danger
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#### Hazard statements

: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon	No Code(s) - May form combustible dust concentrations in air.
Gas Clean Filter Oxygen	H332 - Harmful if inhaled. H317 - May cause an allergic skin reaction.
Gas Clean Filter Moisture	H350 - May cause cancer. H412 - Harmful to aquatic life with long lasting effects. H350 - May cause cancer. H372 - Causes damage to organs through prolonged or repeated exposure. (lungs)

### Precautionary statements

#### Prevention

: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen	Not applicable. P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P261 - Avoid breathing dust. P272 (OSHA) - Contaminated work clothing must not be allowed out of the workplace.
Gas Clean Filter Moisture	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions

## Section 2. Hazards identification

<b>Response</b>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon</li> <li><input checked="" type="checkbox"/> Gas Clean Filter Oxygen</li> </ul>	<p>have been read and understood.                  P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.                  P260 - Do not breathe dust.                  P270 - Do not eat, drink or smoke when using this product.                  P264 - Wash hands thoroughly after handling.</p>
	<ul style="list-style-type: none"> <li>Gas Clean Filter Moisture</li> </ul>	<p>Not applicable.                  P308 + P313 - IF exposed or concerned: Get medical attention.                  P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.                  P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.                  P333 + P313 - If skin irritation or rash occurs: Get medical attention.                  P314 - Get medical attention if you feel unwell.                  P308 + P313 - IF exposed or concerned: Get medical attention.</p>
<b>Storage</b>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon</li> <li><input checked="" type="checkbox"/> Gas Clean Filter Oxygen</li> <li><input checked="" type="checkbox"/> Gas Clean Filter Moisture</li> </ul>	<p>Not applicable.                  P405 - Store locked up.                  P405 - Store locked up.</p>
<b>Disposal</b>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon</li> <li><input checked="" type="checkbox"/> Gas Clean Filter Oxygen</li> </ul>	<p>Not applicable.                  P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.</p>
	<ul style="list-style-type: none"> <li>Gas Clean Filter Moisture</li> </ul>	<p>P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.</p>
<b>Supplemental label elements</b>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon</li> </ul>	<p>Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.</p>
	<ul style="list-style-type: none"> <li>Gas Clean Filter Oxygen</li> <li>Gas Clean Filter Moisture</li> </ul>	<p>None known.                  None known.</p>
<b>2.3 Other hazards</b>		
<b>Hazards not otherwise classified</b>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon</li> <li><input checked="" type="checkbox"/> Gas Clean Filter Oxygen</li> <li><input checked="" type="checkbox"/> Gas Clean Filter Moisture</li> </ul>	<p>None known.                  None known.                  None known.</p>

## 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.

<b>Substance/mixture</b>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon</li> <li><input checked="" type="checkbox"/> Gas Clean Filter Oxygen</li> <li><input checked="" type="checkbox"/> Gas Clean Filter Moisture</li> </ul>	<p>Substance (encapsulated in article)                  Mixture (encapsulated in article)                  Mixture (encapsulated in article)</p>
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### Section 3. Composition/information on ingredients

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

#### 4.1 Description of necessary first aid measures

<b>Eye contact</b>	: <b>Gas Clean Filter Hydrocarbon</b>	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 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.
<b>Inhalation</b>	: <b>Gas Clean Filter Hydrocarbon</b>	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 adverse health effects persist or are severe. 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 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

## Section 4. First aid measures

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. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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 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. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. 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 Oxygen

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is

## Section 4. First aid measures

Gas Clean Filter Moisture

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.

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

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

#### Potential acute health effects

**Eye contact** : Gas Clean Filter Hydrocarbon

Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Gas Clean Filter Oxygen  
Gas Clean Filter Moisture

No known significant effects or critical hazards.  
No known significant effects or critical hazards.

**Inhalation** : Gas Clean Filter Hydrocarbon

Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Gas Clean Filter Oxygen  
Gas Clean Filter Moisture

Harmful if inhaled.

No known significant effects or critical hazards.

**Skin contact** : Gas Clean Filter Hydrocarbon  
Gas Clean Filter Oxygen  
Gas Clean Filter Moisture

No known significant effects or critical hazards.

May cause an allergic skin reaction.

No known significant effects or critical hazards.

**Ingestion** : Gas Clean Filter Hydrocarbon  
Gas Clean Filter Oxygen  
Gas Clean Filter Moisture

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : Gas Clean Filter Hydrocarbon

Adverse symptoms may include the following:  
irritation

redness

Gas Clean Filter Oxygen  
Gas Clean Filter Moisture

No specific data.

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.

## Section 4. First aid measures

<b>Skin contact</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon	No specific data.
	Gas Clean Filter Oxygen	Adverse symptoms may include the following: irritation redness
<b>Ingestion</b>	Gas Clean Filter Moisture	No specific data.
	: <input checked="" type="checkbox"/> 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

<b>Notes to physician</b>	: <input checked="" type="checkbox"/> 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.
<b>Specific treatments</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon	No specific treatment.
	Gas Clean Filter Oxygen	No specific treatment.
	Gas Clean Filter Moisture	No specific treatment.
<b>Protection of first-aiders</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	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


<b>Suitable extinguishing media</b>	: <input checked="" type="checkbox"/> 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.

## Section 5. Fire-fighting measures

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


Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.  
 None known.  
 None known.

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

**Specific hazards arising from the chemical** :  Gas Clean Filter Hydrocarbon  
 Gas Clean Filter Oxygen

Gas Clean Filter Moisture

May form explosible dust-air mixture if dispersed. This material is harmful 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. No specific fire or explosion hazard.

**Hazardous thermal decomposition products** :  Gas Clean Filter Hydrocarbon

Gas Clean Filter Oxygen


Gas Clean Filter Moisture

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

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

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

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** :  Gas Clean Filter Hydrocarbon


Gas Clean Filter Oxygen

Gas Clean Filter Moisture

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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

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

Gas Clean Filter Oxygen

Gas Clean Filter Moisture

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

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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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 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". 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". 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

Gas Clean Filter Moisture

**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.

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).

## Section 6. Accidental release measures

### 6.3 Methods and materials 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, 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). Do not ingest. Avoid contact with eyes, skin and clothing. 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. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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 grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

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

## Section 7. Handling and storage

(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.

### 7.2 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 oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in 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.

## Section 7. Handling and storage

Gas Clean Filter Moisture

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 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)

<b>Recommendations</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not applicable. Not applicable. Not applicable.

## 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

Ingredient name	Exposure limits
<input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon carbon	None.
<b>Gas Clean Filter Oxygen</b> Copper oxide, Activated	<b>NIOSH REL (United States, 10/2016).</b> TWA: 0.1 mg/m <sup>3</sup> , (as Cu) 10 hours. Form: Fume
Manganese dioxide	<b>OSHA PEL 1989 (United States, 3/1989).</b> CEIL: 5 mg/m <sup>3</sup> , (as Mn) <b>NIOSH REL (United States, 10/2016).</b> TWA: 1 mg/m <sup>3</sup> , (as Mn) 10 hours. Form: Fume STEL: 3 mg/m <sup>3</sup> , (as Mn) 15 minutes. Form: Fume <b>OSHA PEL (United States, 6/2016).</b> CEIL: 5 mg/m <sup>3</sup> , (as Mn) <b>ACGIH TLV (United States, 3/2017).</b> TWA: 0.1 mg/m <sup>3</sup> , (as Mn) 8 hours. Form: Inhalable fraction TWA: 0.02 mg/m <sup>3</sup> , (as Mn) 8 hours. Form: Respirable fraction
nickel monoxide	<b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 1 mg/m <sup>3</sup> , (as Ni) 8 hours. <b>NIOSH REL (United States, 10/2016).</b> TWA: 0.015 mg/m <sup>3</sup> , (as Ni) 10 hours. <b>ACGIH TLV (United States, 3/2017).</b>

## Section 8. Exposure controls/personal protection

### Gas Clean Filter Moisture

crystalline silica, respirable powder

crystobalite

TWA: 0.2 mg/m<sup>3</sup>, (as Ni) 8 hours. Form: Inhalable fraction  
**OSHA PEL (United States, 6/2016).**  
 TWA: 1 mg/m<sup>3</sup>, (as Ni) 8 hours.

### OSHA PEL Z3 (United States, 6/2016).

TWA: 250 mppcf / (%SiO<sub>2</sub>+5) 8 hours. Form: Respirable

TWA: 10 mg/m<sup>3</sup> / (%SiO<sub>2</sub>+2) 8 hours. Form: Respirable

### OSHA PEL 1989 (United States, 3/1989).

TWA: 0.1 mg/m<sup>3</sup>, (as quartz) 8 hours. Form: Respirable dust

### OSHA PEL (United States, 6/2016).

TWA: 50 µg/m<sup>3</sup> 8 hours. Form: Respirable dust

### ACGIH TLV (United States, 3/2017).

TWA: 0.025 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

### NIOSH REL (United States, 10/2016).

TWA: 0.05 mg/m<sup>3</sup> 10 hours. Form: respirable dust

### OSHA PEL Z3 (United States, 6/2016).

TWA: 250 mppcf / 2 x (%SiO<sub>2</sub>+5) 8 hours. Form: Respirable

TWA: 10 mg/m<sup>3</sup> / 2 x (%SiO<sub>2</sub>+2) 8 hours. Form: Respirable

TWA: 30 mg/m<sup>3</sup> / 2 x (%SiO<sub>2</sub>+2) 8 hours. Form: Total dust

### OSHA PEL 1989 (United States, 3/1989).

TWA: 0.05 mg/m<sup>3</sup>, (as quartz) 8 hours. Form: Respirable dust

### OSHA PEL (United States, 6/2016).

TWA: 50 µg/m<sup>3</sup> 8 hours. Form: Respirable dust

### ACGIH TLV (United States, 3/2017).

TWA: 0.025 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

### NIOSH REL (United States, 10/2016).

TWA: 0.05 mg/m<sup>3</sup> 10 hours. Form: respirable dust

### 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

## Section 8. Exposure controls/personal protection

- 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

### 9.1 Information on basic physical and chemical properties

#### Appearance

- |                       |                                |                          |
|-----------------------|--------------------------------|--------------------------|
| <b>Physical state</b> | : Gas Clean Filter Hydrocarbon | Solid. [Powder.]         |
|                       | : Gas Clean Filter Oxygen      | Solid. [Granular solid.] |
|                       | : Gas Clean Filter Moisture    | Solid. [Granular solid.] |
| <b>Color</b>          | : Gas Clean Filter Hydrocarbon | Black.                   |
|                       | : Gas Clean Filter Oxygen      | Brown. [Dark]            |
|                       | : Gas Clean Filter Moisture    | Tan.                     |
| <b>Odor</b>           | : Gas Clean Filter Hydrocarbon | None                     |
|                       | : Gas Clean Filter Oxygen      | Not available.           |
|                       | : Gas Clean Filter Moisture    | Not available.           |
| <b>Odor threshold</b> | : Gas Clean Filter Hydrocarbon | Not available.           |
|                       | : Gas Clean Filter Oxygen      | Not available.           |
|                       | : Gas Clean Filter Moisture    | Not available.           |
| <b>pH</b>             | : Gas Clean Filter Hydrocarbon | Not available.           |
|                       | : Gas Clean Filter Oxygen      | Not available.           |
|                       | : Gas Clean Filter Moisture    | Not available.           |
| <b>Melting point</b>  | : Gas Clean Filter Hydrocarbon | 3652°C (6605.6°F)        |
|                       | : Gas Clean Filter Oxygen      | Not available.           |
|                       | : Gas Clean Filter Moisture    | Not available.           |
| <b>Boiling point</b>  | : Gas Clean Filter Hydrocarbon | Not available.           |
|                       | : Gas Clean Filter Oxygen      | Not available.           |
|                       | : Gas Clean Filter Moisture    | Not available.           |

## Section 9. Physical and chemical properties

<b>Flash point</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not available. Not available. Closed cup: >535°C (>995°F)
<b>Evaporation rate</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not applicable. Not available. Not available.
<b>Flammability (solid, gas)</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not available. Not available. Not available.
<b>Lower and upper explosive (flammable) limits</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not available. Not available. Not available.
<b>Vapor pressure</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not available. Not available. Not available.
<b>Vapor density</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not available. Not available. Not available.
<b>Relative density</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	1.9 to 2.2 [Water = 1] Not available. Not available.
<b>Solubility</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon  Gas Clean Filter Oxygen  Gas Clean Filter Moisture	Insoluble in the following materials: cold water and hot water. Insoluble in the following materials: cold water and hot water. Insoluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not available. Not available. Not available.
<b>Auto-ignition temperature</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	452°C (845.6°F) Not available. Not available.
<b>Decomposition temperature</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not available. Not available. Not available.
<b>Viscosity</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not available. Not available. Not available.

## Section 10. Stability and reactivity

<b>10.1 Reactivity</b>	: <input checked="" type="checkbox"/> 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. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	The product is stable. The product is stable. The product is stable.

## Section 10. Stability and reactivity

<b>10.3 Possibility of hazardous reactions</b>	: <input checked="" type="checkbox"/> 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.
<b>10.4 Conditions to avoid</b>	: <input checked="" type="checkbox"/> 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 grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
	Gas Clean Filter Oxygen	No specific data.
	Gas Clean Filter Moisture	No specific data.
<b>10.5 Incompatible materials</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon	Reactive or incompatible with the following materials: 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.
<b>10.6 Hazardous decomposition products</b>	: <input checked="" type="checkbox"/> 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
<input checked="" type="checkbox"/> Gas Clean Filter Oxygen Copper oxide, Activated Manganese dioxide nickel monoxide	LD50 Oral	Rat	470 mg/kg	-
	LD50 Oral	Rat	3478 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat - Male, Female	>5.08 mg/l	4 hours
	LD50 Oral	Rat - Female	9990 mg/kg	-

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Conclusion/Summary

**Skin** : May cause sensitization by skin contact.

#### Mutagenicity



## Section 11. Toxicological information

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Classification

Product/ingredient name	OSHA	IARC	NTP
<input checked="" type="checkbox"/> <b>Gas Clean Filter Oxygen</b> nickel monoxide	-	1	Known to be a human carcinogen.
<b>Gas Clean Filter Moisture</b> crystalline silica, respirable powder	-	1	Known to be a human carcinogen.
crystalalite	-	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
<input checked="" type="checkbox"/> <b>Gas Clean Filter Oxygen</b> nickel monoxide	Category 1	Not determined	lungs
<b>Gas Clean Filter Moisture</b> crystalline silica, respirable powder	Category 1	Inhalation	lungs
crystalalite	Category 1	Inhalation	lungs

### Aspiration hazard

Not available.

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

### Potential acute health effects

**Eye contact** :  Gas Clean Filter Hydrocarbon : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.  
 Gas Clean Filter Oxygen : No known significant effects or critical hazards.  
 Gas Clean Filter Moisture : No known significant effects or critical hazards.

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

## Section 11. Toxicological information

<b>Ingestion</b>	: ☑ 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

<b>Eye contact</b>	: ☑ 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.
<b>Inhalation</b>	: ☑ 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.
<b>Skin contact</b>	: ☑ Gas Clean Filter Hydrocarbon	No specific data.
	Gas Clean Filter Oxygen	Adverse symptoms may include the following: irritation redness
	Gas Clean Filter Moisture	No specific data.
<b>Ingestion</b>	: ☑ 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

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

#### Long term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

#### Potential chronic health effects

<b>General</b>	: ☑ Gas Clean Filter Hydrocarbon	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
	Gas Clean Filter Oxygen	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.
<b>Carcinogenicity</b>	: ☑ 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.
<b>Mutagenicity</b>	: ☑ 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.
<b>Teratogenicity</b>	: ☑ 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

<b>Developmental effects</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Fertility effects</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
<input checked="" type="checkbox"/> Gas Clean Filter Oxygen Oral Inhalation (dusts and mists)	2735.1 mg/kg 1.578 mg/l

<b>Other information</b>	: <input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon Gas Clean Filter Oxygen Gas Clean Filter Moisture	Not available. Not available. Not available.
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## Section 12. Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon carbon	Acute LC50 1000 mg/l Fresh water	Fish - Danio rerio	96 hours
<b>Gas Clean Filter Oxygen</b> Copper oxide, Activated	Acute LC50 2.6 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
Manganese dioxide	Acute LC50 >56000 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours
	EC50 >100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	LC50 >100 mg/l NOEC >100 mg/l	Fish - Oncorhynchus mykiss Fish - Oncorhynchus mykiss	96 hours 96 hours

### 12.2 Persistence and degradability

Not available.

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Gas Clean Filter Oxygen</b> nickel monoxide	-	5613	high

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : 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 Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

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

**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

## Section 15. Regulatory information

**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		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
<input checked="" type="checkbox"/> Gas Clean Filter Oxygen Sulphuric acid	<0.1	Yes.	1000	66.3	1000	66.3

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

### SARA 311/312

**Classification** :

<input checked="" type="checkbox"/> Gas Clean Filter Hydrocarbon	COMBUSTIBLE DUSTS
Gas Clean Filter Oxygen	ACUTE TOXICITY (inhalation) - Category 4 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A CARCINOGENICITY - Category 1A
Gas Clean Filter Moisture	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (lungs) - Category 1

#### Composition/information on ingredients

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

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	<input checked="" type="checkbox"/> Gas Clean Filter Oxygen Copper oxide, Activated Manganese dioxide nickel monoxide	1317-38-0 1313-13-9 1313-99-1	≤10 ≤10 <1

## Section 15. Regulatory information


<b>Supplier notification</b>	<b>Gas Clean Filter Oxygen</b>		
	Copper oxide, Activated	1317-38-0	≤10
	Manganese dioxide	1313-13-9	≤10
	nickel monoxide	1313-99-1	<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; CRISTOBALITE DUST; SILICA, CRYSTALLINE, QUARTZ
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: ALUMINUM OXIDE; alpha-ALUMINA; COPPER compounds; NICKEL OXIDE; NICKEL MONOXIDE; SILICA, CRISTOBALITE; CRISTOBALITE (SiO<sub>2</sub>); SILICA, QUARTZ; QUARTZ (SiO<sub>2</sub>)
- Pennsylvania** : The following components are listed: ALUMINUM OXIDE; COPPER COMPOUNDS; MANGANESE COMPOUNDS; NICKEL OXIDE; CRISTOBALITE DUST; CRISTOBALITE; QUARTZ DUST; QUARTZ

### California Prop. 65

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

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

### International regulations

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

Not listed.

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

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

Not listed.

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

Not listed.

### Inventory list

- Australia** : All components are listed or exempted.
- Canada** : Not determined.
- China** : All components are listed or exempted.
- Europe** : All components are listed or exempted.

## Section 15. Regulatory information

<b>Japan</b>	: <b>Japan inventory (ENCS):</b> All components are listed or exempted. <b>Japan inventory (ISHL):</b> All components are listed or exempted.
<b>Malaysia</b>	: All components are listed or exempted.
<b>New Zealand</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: <input checked="" type="checkbox"/> Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: All components are listed or exempted.
<b>Viet Nam</b>	: <input checked="" type="checkbox"/> Not determined.

## Section 16. Other information

### History

<b>Date of issue</b>	: 09/11/2018
<b>Date of previous issue</b>	: 04/27/2017
<b>Version</b>	: 4

### Procedure used to derive the classification

Classification	Justification
<input checked="" type="checkbox"/> <b>Gas Clean Filter Hydrocarbon</b> COMBUSTIBLE DUSTS	On basis of test data
<b>Gas Clean Filter Oxygen</b> ACUTE TOXICITY (inhalation) - Category 4 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method Calculation method Calculation method Calculation method Calculation method
<b>Gas Clean Filter Moisture</b> CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (lungs) - Category 1	Calculation method Calculation method

Indicates information that has changed from previously issued version.

### Notice to reader

**Disclaimer:** The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.