

# Gas filter kit - FID 1/8"

#### Conforms to US OSHA Hazard Communication 29CFR1910.1200

#### Section 1. Identification

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

1.1 Product identifier

Product name : Gas filter kit - FID 1/8" (4 gas filters, connecting unit - 4 position)

Part No. (Chemical Kit) : 1035168

Part No. : 1035210 Gas filter - Oxygen

1035220 Gas filter - Moisture 1035230 Gas filter - Hydrocarbon

Validation date : 10/28/2015

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

Material uses : Analytical chemistry.

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

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer : Trajan Scientific Australia Pty Ltd

7 Argent Place, Ringwood, Victoria 3134, Australia

Toll Free (Australia): 1800 257 213 | Tel: +61 (0) 3 9874 8577

www.trajanscimed.com

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 Oxygen This material is considered hazardous by the OSHA

Hazard Communication Standard (29 CFR 1910.1200).
Gas Clean Filter Moisture

Hazard Communication Standard (29 CFR 1910.1200).
This material is considered hazardous by the OSHA

Hazard Communication Standard (29 CFR 1910.1200).

Gas Clean Filter This material is considered hazardous by the OSHA

Hydrocarbon Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

Gas Clean Filter Oxygen

H317 SKIN SENSITIZATION - Category 1 H350 CARCINOGENICITY - Category 1A

H372 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (lungs) - Category

1

**Gas Clean Filter Moisture** 

H350 CARCINOGENICITY - Category 1A

H371 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (lungs) - Category 2
H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (lungs) - Category

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# Section 2. Hazards identification

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#### Gas Clean Filter Hydrocarbon

Comb. Dusts H373

**COMBUSTIBLE DUSTS** 

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (lungs) - Category

2

Ingredients of unknown toxicity

Gas Clean Filter Oxygen
Gas Clean Filter Moisture

Not applicable.

Danger

Danger

Percentage of the mixture consisting of ingredient

(s) of unknown toxicity: 100%

Gas Clean Filter Hydrocarbon Not applicable.

#### 2.2 GHS label elements

**Hazard pictograms** 

**Hazard statements** 





Signal word : Gas Clean Filter Oxygen

Gas Clean Filter Moisture
Gas Clean Filter Hydrocarbon
: Gas Clean Filter Oxygen

Warning H317 - May cause an allergic skin reaction.

H350 - May cause cancer.

H372 - Causes damage to organs through prolonged or repeated exposure. (lungs)

Gas Clean Filter Moisture H350 - May cause cancer.

H371 - May cause damage to organs. (lungs) H373 - May cause damage to organs through prolonged or repeated exposure. (lungs)

Gas Clean Filter Hydrocarbon

No Code(s) - May form combustible dust

concentrations in air.

H373 - May cause damage to organs through prolonged or repeated exposure. (lungs)

#### **Precautionary statements**

**Prevention** 

: Gas Clean Filter Oxygen

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.

P260 - Do not breathe dust.

P270 - Do not eat, drink or smoke when using this

product.

P264 - Wash hands thoroughly after handling. 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

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.

Gas Clean Filter Hydrocarbon P260 - Do not breathe dust or mist.

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## Section 2. Hazards identification

| Response                         | : Gas Clean Filter Oxygen  | P314 - Get medical attention if you feel unwell. P308 + P313 - IF exposed or concerned: Get medical attention. 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. |
|----------------------------------|--|--|
|                                  | Gas Clean Filter Moisture  | P314 - Get medical attention if you feel unwell. P308 + P311 - IF exposed or concerned: Call a POISON CENTER or physician.   |
|                                  | Gas Clean Filter Hydrocarbon   | P314 - Get medical attention if you feel unwell.   |
| Storage                          | : Gas Clean Filter Oxygen Gas Clean Filter Moisture Gas Clean Filter Hydrocarbon       | P405 - Store locked up.<br>P405 - Store locked up.<br>Not applicable.  |
| Disposal                         | : 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.   |
|                                  | Gas Clean Filter Hydrocarbon   | P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.   |
| Supplemental label               | : Gas Clean Filter Oxygen  | None known.  |
| elements                         | Gas Clean Filter Moisture  | None known.  |
|                                  | Gas Clean Filter Hydrocarbon   | Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.   |
| 2.3 Other hazards                |  |  |
| Hazards not otherwise classified | : Gas Clean Filter Oxygen<br>Gas Clean Filter Moisture<br>Gas Clean Filter Hydrocarbon | None known. None known. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.  |

# 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 Oxygen Mixture (encapsulated in article)
Gas Clean Filter Moisture Mixture (encapsulated in article)
Gas Clean Filter Hydrocarbon Substance (encapsulated in article)

| Ingredient name                       | %         | CAS number |
|---------------------------------------|-----------|------------|
| Gas Clean Filter Oxygen               |           |            |
| aluminium oxide                       | ≥75 - <90 | 1344-28-1  |
| Activated Copper oxide                | ≥5 - <10  | 1317-38-0  |
| Manganese dioxide                     | ≥5 - <10  | 1313-13-9  |
| nickel monoxide                       | ≥0.3 - <1 | 1313-99-1  |
| Gas Clean Filter Moisture             |           |            |
| crystalline silica, respirable powder | ≥5 - <10  | 14808-60-7 |
| cristobalite                          | ≥5 - <10  | 14464-46-1 |

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# Section 3. Composition/information on ingredients

| Gas Clean Filter Hydrocarbon |     |           |
|------------------------------|-----|-----------|
| carbon                       | 100 | 7440-44-0 |

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

Eye contact : 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. If necessary, call a poison

center or physician.

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. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling

unwell.

Inhalation : Gas Clean Filter Oxygen 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.

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 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.

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

Gas Clean Filter Hydrocarbon

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### Section 4. First aid measures

Skin contact : Gas Clean Filter Oxygen

Gas Clean Filter Moisture

Gas Clean Filter Hydrocarbon

Ingestion : Gas Clean Filter Oxygen

Gas Clean Filter Moisture

mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. 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 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.

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. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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.

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 necessary, call a poison center or physician. 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.

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### Section 4. First aid measures

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 following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

**Eye contact** : Gas Clean Filter Oxygen

Gas Clean Filter Moisture

Gas Clean Filter Hydrocarbon

No known significant effects or critical hazards. No known significant effects or critical hazards. Exposure to airborne concentrations above statutory or recommended exposure limits may

cause irritation of the eyes.

Inhalation : Gas Clean Filter Oxygen

Gas Clean Filter Moisture
Gas Clean Filter Hydrocarbon

No known significant effects or critical hazards. No known significant effects or critical hazards. Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact : Gas Clean Filter Oxygen

Gas Clean Filter Moisture
Gas Clean Filter Hydrocarbon

Ingestion : Gas Clean Filter Oxygen

Gas Clean Filter Moisture
Gas Clean Filter Hydrocarbon

May cause an allergic skin reaction.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

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 Oxygen

Gas Clean Filter Moisture No specific data.

Gas Clean Filter Hydrocarbon Adverse symptoms may include the following:

No specific data.

irritation redness

Inhalation : Gas Clean Filter Oxygen No specific data.

Gas Clean Filter Moisture No specific data.

Gas Clean Filter Hydrocarbon Adverse symptoms may include the following:

respiratory tract irritation

coughing

**Skin contact**: Gas Clean Filter Oxygen Adverse symptoms may include the following:

irritation redness

Gas Clean Filter Moisture No specific data.

Gas Clean Filter Hydrocarbon No specific data.

Ingestion : Gas Clean Filter Oxygen No specific data.

Gas Clean Filter Moisture No specific data.

Gas Clean Filter Hydrocarbon No specific data.

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### Section 4. First aid measures

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

Notes to physician : 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.

Gas Clean Filter Hydrocarbon Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Specific treatments : Gas Clean Filter Oxygen No specific treatment.

Gas Clean Filter Moisture No specific treatment.

No specific treatment.

Gas Clean Filter Hydrocarbon

No specific treatment.

No specific treatment.

**Protection of first-aiders** : 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.

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.

See toxicological information (Section 11)

# Section 5. Fire-fighting measures

#### 5.1 Extinguishing media

Suitable extinguishing

media

: 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 Oxygen None known.
Gas Clean Filter Moisture None known.

Gas Clean Filter Hydrocarbon Do not use water jet.

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

Specific hazards arising from the chemical

: Gas Clean Filter Oxygen
Gas Clean Filter Moisture
Gas Clean Filter Hydrocarbon

No specific fire or explosion hazard. No specific fire or explosion hazard.

Fine dust clouds may form explosive mixtures with

air.

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# Section 5. Fire-fighting measures

Hazardous thermal decomposition products

: Gas Clean Filter Oxygen

Decomposition products may include the following

materials:

metal oxide/oxides

Gas Clean Filter Moisture Decomposition products may include the following

materials:

metal oxide/oxides

Gas Clean Filter Hydrocarbon Decomposition

Decomposition products may include the following materials:

carbon dioxide carbon monoxide

**5.3 Advice for firefighters** 

Special protective actions for fire-fighters

: 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.

Gas Clean Filter Hydrocarbon

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

Special protective equipment for fire-fighters

: 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.

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.

### Section 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Gas Clean Filter Oxygen

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. 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.

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### Section 6. Accidental release measures

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.

For emergency responders : Gas Clean Filter Oxygen

Gas Clean Filter Moisture

Gas Clean Filter Hydrocarbon

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

6.2 Environmental precautions

: Gas Clean Filter Oxygen

Gas Clean Filter Moisture

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).

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).

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

: Gas Clean Filter Oxygen Methods for cleaning up

Gas Clean Filter Moisture

Gas Clean Filter Hydrocarbon

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. 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.

Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.

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# Section 7. Handling and storage

#### 7.1 Precautions for safe handling

**Protective measures** 

: Gas Clean Filter Oxygen

Gas Clean Filter Moisture

Gas Clean Filter Hydrocarbon

Advice on general occupational hygiene : Gas Clean Filter Oxygen

Gas Clean Filter Moisture

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. 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.

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.

Put on appropriate personal protective equipment (see Section 8). Do not breathe dust. Do not ingest. Avoid contact with eyes, skin and clothing. 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.

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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and

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# Section 7. Handling and storage

Gas Clean Filter Hydrocarbon

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. 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 Oxygen

Gas Clean Filter Moisture

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. 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. 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. Storage temperature: 25°C (77°F). 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.

#### 7.3 Specific end use(s)

Recommendations

: Gas Clean Filter Oxygen Gas Clean Filter Moisture Gas Clean Filter Hydrocarbon

Industrial sector specific solutions

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

Not applicable. Not applicable. Not applicable.

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# 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   |
|---------------------------------------|---|
| Gas Clean Filter Oxygen               |   |
| aluminium oxide                       | OSHA PEL 1989 (United States, 3/1989).                      |
|                                       | TWA: 10 mg/m³ 8 hours. Form: Dust                           |
|                                       | TWA: 5 mg/m³ 8 hours. Form: Respirable                      |
|                                       | fraction  |
|                                       | NIOSH REL (United States, 10/2013).                         |
|                                       | TWA: 5 mg/m³, (as Al) 10 hours. Form:                       |
|                                       | PYRO POWDERS AND WELDING FUMES                              |
|                                       | OSHA PEL (United States, 2/2013).                           |
|                                       | TWA: 5 mg/m³ 8 hours. Form: Respirable                      |
|                                       | fraction  |
|                                       | TWA: 15 mg/m³ 8 hours. Form: Total dust                     |
|                                       | ACGIH TLV (United States, 3/2015).                          |
|                                       | TWA: 1 mg/m³ 8 hours. Form: Respirable fraction             |
| Activated Copper oxide                | NIOSH REL (United States, 10/2013).                         |
| Activated Copper Oxide                | TWA: 0.1 mg/m³, (as Cu) 10 hours. Form:                     |
|                                       | Fume  |
|                                       | OSHA PEL (United States).                                   |
|                                       | TWA: 1 mg/m³, (Cu) 8 hours. Form: Total                     |
|                                       | dust  |
|                                       | ACGIH TLV (United States).                                  |
|                                       | TWA: 1 mg/m³, (Cu) 8 hours. Form: Total                     |
|                                       | dust  |
| Manganese dioxide                     | NIOSH REL (United States, 10/2013).                         |
| -                                     | TWA: 1 mg/m³, (as Mn) 10 hours. Form:                       |
|                                       | Fume  |
|                                       | STEL: 3 mg/m³, (as Mn) 15 minutes. Form:                    |
|                                       | Fume  |
|                                       | OSHA PEL 1989 (United States, 3/1989).                      |
|                                       | CEIL: 5 mg/m³, (as Mn)                                      |
|                                       | ACGIH TLV (United States, 3/2015).                          |
|                                       | TWA: 0.1 mg/m³, (as Mn) 8 hours. Form:                      |
|                                       | Inhalable fraction  |
|                                       | TWA: 0.02 mg/m³, (as Mn) 8 hours. Form: Respirable fraction |
|                                       | OSHA PEL (United States, 2/2013).                           |
|                                       | CEIL: 5 mg/m³, (as Mn)                                      |
| nickel monoxide                       | ACGIH TLV (United States, 3/2015).                          |
| Thore monoxide                        | TWA: 0.2 mg/m³, (as Ni) 8 hours. Form:                      |
|                                       | Inhalable fraction  |
|                                       | NIOSH REL (United States, 10/2013). Notes:                  |
|                                       | as Ni   |
|                                       | TWA: 0.015 mg/m³, (as Ni) 10 hours.                         |
|                                       | OSHA PEL (United States, 2/2013). Notes:                    |
|                                       | as Ni   |
|                                       | TWA: 1 mg/m³, (as Ni) 8 hours.                              |
|                                       | OSHA PEL 1989 (United States, 3/1989).                      |
|                                       | Notes: as Ni  |
|                                       | TWA: 1 mg/m³, (as Ni) 8 hours.                              |
| Gas Clean Filter Moisture             |   |
| crystalline silica, respirable powder | OSHA PEL Z3 (United States, 2/2013).                        |

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cristobalite

# Section 8. Exposure controls/personal protection

TWA: 250 MPPCF / (%SiO2+5) 8 hours.

Form: Respirable

TWA: 10 MG/M3 / (%SiO2+2) 8 hours. Form:

Respirable

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

TWA: 0.1 mg/m³, (as quartz) 8 hours. Form:

Respirable dust

ACGIH TLV (United States, 3/2015).

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

Respirable fraction

NIOSH REL (United States, 10/2013).

TWA: 0.05 mg/m³ 10 hours. Form: respirable

dust

OSHA PEL Z3 (United States, 2/2013).

TWA: 250 MPPCF / 2 x (%SiO2+5) 8 hours.

Form: Respirable

TWA: 10 MG/M3 / 2 x (%SiO2+2) 8 hours.

Form: Respirable

TWA: 30 MG/M3 / 2 x (%SiO2+2) 8 hours.

Form: Total dust

OSHA PEL 1989 (United States, 3/1989). TWA: 0.05 mg/m³, (as quartz) 8 hours. Form:

Respirable dust

ACGIH TLV (United States, 3/2015).

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

Respirable fraction

NIOSH REL (United States, 10/2013).

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

dust

None.

Gas Clean Filter Hydrocarbon carbon

#### **8.2 Exposure controls**

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, 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 sideshields.

**Skin protection** 

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# Section 8. Exposure controls/personal 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** 

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

# Section 9. Physical and chemical properties

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

| _ |   |   |   |   |    |   |    |  |
|---|---|---|---|---|----|---|----|--|
| Δ | n | n | Δ | 2 | ra | n | ce |  |
| _ | u | u | • | а | ıa |   | ᆫ  |  |

pН

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

Color : Gas Clean Filter Oxygen Brown. [Dark]

> Gas Clean Filter Moisture Tan. Gas Clean Filter Hydrocarbon Black.

: Gas Clean Filter Oxygen Not available. Odor Gas Clean Filter Moisture

Not available. Gas Clean Filter Hydrocarbon None

**Odor threshold** : Gas Clean Filter Oxygen Not available.

> Gas Clean Filter Moisture Not available. Gas Clean Filter Hydrocarbon Not available. : Gas Clean Filter Oxygen Not available. Gas Clean Filter Moisture Not available.

Gas Clean Filter Hydrocarbon Not available. : Gas Clean Filter Oxygen Not available. **Melting point** 

Gas Clean Filter Moisture Not available. Gas Clean Filter Hydrocarbon 3652°C (6605.6°F)

**Boiling point** Gas Clean Filter Oxygen Not available.

Gas Clean Filter Moisture Not available. Gas Clean Filter Hydrocarbon Not available. : Gas Clean Filter Oxygen Not available.

Flash point Gas Clean Filter Moisture Closed cup: >535°C (>995°F)

> Gas Clean Filter Hydrocarbon Not available. Gas Clean Filter Oxygen Not available.

**Evaporation rate** Gas Clean Filter Moisture Not available. Gas Clean Filter Hydrocarbon

Not applicable. : Gas Clean Filter Oxygen Not available. Gas Clean Filter Moisture Not available. Gas Clean Filter Hydrocarbon Not available.

Lower and upper explosive

Flammability (solid, gas)

: Gas Clean Filter Oxygen (flammable) limits

Gas Clean Filter Moisture Not available. Gas Clean Filter Hydrocarbon Not available.

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Not available.

**Viscosity** 

# Section 9. Physical and chemical properties

Vapor pressure : Gas Clean Filter Oxygen Not available. Gas Clean Filter Moisture Not available. Gas Clean Filter Hydrocarbon Not available. Vapor density : Gas Clean Filter Oxygen Not available. Gas Clean Filter Moisture Not available. Gas Clean Filter Hydrocarbon Not available. **Relative density** : Gas Clean Filter Oxygen Not available. Gas Clean Filter Moisture Not available. Gas Clean Filter Hydrocarbon 1.9 to 2.2 [Water = 1]**Solubility** : Gas Clean Filter Oxygen Insoluble in the following materials: cold water and hot water. Gas Clean Filter Moisture Insoluble in the following materials: cold water and hot water. Gas Clean Filter Hydrocarbon Insoluble in the following materials: cold water and hot water. Partition coefficient: n-: Gas Clean Filter Oxygen Not available. Gas Clean Filter Moisture Not available. octanol/water Gas Clean Filter Hydrocarbon Not available. **Auto-ignition temperature** : Gas Clean Filter Oxygen Not available. Gas Clean Filter Moisture Not available. Gas Clean Filter Hydrocarbon 452°C (845.6°F) **Decomposition temperature**: Gas Clean Filter Oxygen Not available. Gas Clean Filter Moisture Not available.

# Section 10. Stability and reactivity

| 10.1 Reactivity | : 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

Not available.

Not available.

Not available.

Not available.

for this product or its ingredients.

Gas Clean Filter Hydrocarbon No specific test data related to reactivity available

for this product or its ingredients.

**10.2 Chemical stability** : Gas Clean Filter Oxygen The product is stable. Gas Clean Filter Moisture The product is stable.

Gas Clean Filter Hydrocarbon

Gas Clean Filter Hydrocarbon

: Gas Clean Filter Oxygen

Gas Clean Filter Moisture

Gas Clean Filter Hydrocarbon The product is stable.

The product is stable.

The product is stable.

Gas Clean Filter Hydrocarbon The product is stable

**10.3 Possibility of** : Gas Clean Filter Oxygen Under normal conditions of storage and use, hazardous reactions ull not occur.

Gas Clean Filter Moisture Under normal conditions of storage and use,

hazardous reactions will not occur.

Gas Clean Filter Hydrocarbon Under normal conditions of storage and use,

hazardous reactions will not occur.

**10.4 Conditions to avoid** : Gas Clean Filter Oxygen No specific data. Gas Clean Filter Moisture No specific data.

Gas Clean Filter Hydrocarbon Avoid the creation of dust v

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

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# Section 10. Stability and reactivity

transferring material. Prevent dust accumulation.

10.5 Incompatible 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.

Gas Clean Filter Hydrocarbon Reactive or incompatible with the following

materials:

oxidizing materials

10.6 Hazardous decomposition products

: 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.

Gas Clean Filter Hydrocarbon 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 Oxygen |           |         |             |          |
| aluminium oxide         | LD50 Oral | Rat     | >5000 mg/kg | -        |
| Activated Copper oxide  | LD50 Oral | Rat     | 470 mg/kg   | -        |
| Manganese dioxide       | LD50 Oral | Rat     | 3478 mg/kg  | -        |
| nickel monoxide         | LD50 Oral | Rat     | >5000 mg/kg | -        |

#### Irritation/Corrosion

Not available.

#### **Sensitization**

Not available.

#### **Conclusion/Summary**

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

**Mutagenicity** 

Not available.

#### **Carcinogenicity**

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

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# **Section 11. Toxicological information**

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

| Name  | Category   | Route of exposure | Target organs                |
|---|------------|-------------------|------------------------------|
| Gas Clean Filter Oxygen Activated Copper oxide                  | Category 3 |                   | Respiratory tract irritation |
| Gas Clean Filter Moisture crystalline silica, respirable powder | Category 2 | Inhalation        | lungs                        |

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

| Name  | Category                 | Route of exposure            | Target organs  |
|---|--------------------------|------------------------------|----------------|
| Gas Clean Filter Oxygen aluminium oxide nickel monoxide | Category 1<br>Category 1 | Inhalation<br>Not determined | lungs<br>lungs |
| Gas Clean Filter Moisture cristobalite                  | Category 2               | Not determined               | lungs          |
| Gas Clean Filter Hydrocarbon carbon                     | Category 2               | Not determined               | lungs          |

#### **Aspiration hazard**

Not available.

| Information on the likely |
|---------------------------|
| routes of exposure        |

: Gas Clean Filter Oxygen

Routes of entry anticipated: Oral, Dermal,

Inhalation.

Gas Clean Filter Moisture

Routes of entry anticipated: Oral, Dermal,

Inhalation.

Gas Clean Filter Hydrocarbon

Routes of entry anticipated: Oral, Dermal,

Inhalation.

#### Potential acute health effects

**Eye contact** 

: Gas Clean Filter Oxygen Gas Clean Filter Moisture Gas Clean Filter Hydrocarbon No known significant effects or critical hazards. No known significant effects or critical hazards. Exposure to airborne concentrations above statutory or recommended exposure limits may

cause irritation of the eyes.

Inhalation : Gas Clean Filter Oxygen

Gas Clean Filter Moisture
Gas Clean Filter Hydrocarbon

No known significant effects or critical hazards. No known significant effects or critical hazards. Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact : Gas Clean Filter Oxygen May cause an allergic skin reaction.

Gas Clean Filter Moisture Gas Clean Filter Hydrocarbon

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

Ingestion : Gas Clean Filter Oxygen

Gas Clean Filter Moisture
Gas Clean Filter Hydrocarbon

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

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# **Section 11. Toxicological information**

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

**Eye contact** : Gas Clean Filter Oxygen No specific data. Gas Clean Filter Moisture No specific data.

Gas Clean Filter Hydrocarbon Adverse symptoms may include the following:

irritation redness

Inhalation : Gas Clean Filter Oxygen No specific data.

Gas Clean Filter Moisture No specific data.

Gas Clean Filter Hydrocarbon Adverse symptoms may include the following:

respiratory tract irritation

coughing

**Skin contact** : Gas Clean Filter Oxygen Adverse symptoms may include the following:

irritation redness

Gas Clean Filter Moisture
Gas Clean Filter Hydrocarbon

Cas Clean Filter Oxygen
Gas Clean Filter Moisture

No specific data.
No specific data.
No specific data.

Gas Clean Filter Moisture No specific data.

Gas Clean Filter Hydrocarbon No specific data.

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

**Short term exposure** 

Potential immediate : Not available.

effects

Ingestion

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Mutagenicity

Potential delayed effects : Not available.

Potential chronic health effects

General : Gas Clean Filter Oxygen Causes 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 May cause damage to organs through prolonged or

repeated exposure.

Gas Clean Filter Hydrocarbon May cause damage to organs through prolonged or

repeated exposure. Repeated or prolonged inhalation of dust may lead to chronic respiratory

irritation.

Carcinogenicity: 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.

Gas Clean Filter Dyvgon

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. No known significant effects or critical hazards.

**Teratogenicity**: Gas Clean Filter Oxygen No known significant effects or critical hazards.

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.

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

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# **Section 11. Toxicological information**

**Fertility effects** 

: Gas Clean Filter Oxygen Gas Clean Filter Moisture Gas Clean Filter Hydrocarbon 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                  |
|-------|----------------------------|
|       | 2735.1 mg/kg<br>17.44 mg/l |

# **Section 12. Ecological information**

#### **12.1 Toxicity**

| Product/ingredient name | Result                              | Species                              | Exposure |
|-------------------------|-------------------------------------|--------------------------------------|----------|
| Gas Clean Filter Oxygen |                                     |                                      |          |
| aluminium oxide         | Acute EC50 114.357 mg/l Fresh water | Daphnia - Daphnia magna -<br>Neonate | 48 hours |
| Activated Copper oxide  | Acute LC50 2.6 mg/l Fresh water     | Daphnia - Daphnia magna -<br>Neonate | 48 hours |
|                         | Acute LC50 >56000 ppm Fresh water   | Fish - Gambusia affinis - Adult      | 96 hours |

#### 12.2 Persistence and degradability

Not available.

#### 12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF  | Potential |
|-------------------------|--------|------|-----------|
| Gas Clean Filter Oxygen |        |      |           |
| nickel monoxide         | -      | 5613 | high      |

#### **12.4 Mobility in soil**

Soil/water partition coefficient (Koc)

: 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.

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# Section 13. Disposal considerations

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.

**Regulatory information** 

DOT / IMDG / IATA : Not regulated.

# Section 15. Regulatory information

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

U.S. Federal regulations : United States inventory (TSCA 8b): All components are listed or exempted.

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

Clean Water Act (CWA) 311: Sulphuric acid

Clean Air Act Section 112 : Listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 : Not listed

Class I Substances

Clean Air Act Section 602 : Not listed

Class II Substances

**DEA List I Chemicals** : Not listed

(Precursor Chemicals)

**DEA List II Chemicals** : Not listed

(Essential Chemicals)

**SARA 302/304** 

#### **Composition/information on ingredients**

|   |      |      | SARA 302 TPQ |           | SARA 304 RQ |           |
|---|------|------|--------------|-----------|-------------|-----------|
| Name                                      | %    | EHS  | (lbs)        | (gallons) | (lbs)       | (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 : Immediate (acute) health hazard Delayed (chronic) health hazard

**Composition/information on ingredients** 

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# **Section 15. Regulatory information**

| Name                                  | %         | Fire hazard | Sudden<br>release of<br>pressure | Reactive | Immediate<br>(acute)<br>health<br>hazard | Delayed<br>(chronic)<br>health<br>hazard |
|---------------------------------------|-----------|-------------|----------------------------------|----------|--|--|
| Gas Clean Filter Oxygen               |           |             |                                  |          |  |  |
| aluminium oxide                       | ≥75 - <90 | No.         | No.                              | No.      | No.                                      | Yes.                                     |
| Activated Copper oxide                | ≥5 - <10  | No.         | No.                              | No.      | Yes.                                     | No.                                      |
| Manganese dioxide                     | ≥5 - <10  | Yes.        | No.                              | No.      | Yes.                                     | No.                                      |
| nickel monoxide                       | ≥0.3 - <1 | No.         | No.                              | No.      | Yes.                                     | Yes.                                     |
| Gas Clean Filter Moisture             |           |             |                                  |          |  |  |
| crystalline silica, respirable powder | ≥5 - <10  | No.         | No.                              | No.      | Yes.                                     | Yes.                                     |
| cristobalite                          | ≥5 - <10  | No.         | No.                              | No.      | No.                                      | Yes.                                     |
| Gas Clean Filter Hydrocarbon          |           |             |                                  |          |  |  |
| carbon                                | 100       | Yes.        | No.                              | No.      | No.                                      | Yes.                                     |

#### **SARA 313**

|                                 | Product name   | CAS number                                       | %  |
|---------------------------------|--|--|--|
| Form R - Reporting requirements | Gas Clean Filter Oxygen aluminium oxide Activated Copper oxide Manganese dioxide nickel monoxide | 1344-28-1<br>1317-38-0<br>1313-13-9<br>1313-99-1 | ≥75 - <90<br>≥5 - <10<br>≥5 - <10<br>≥0.3 - <1 |
| Supplier notification           | Gas Clean Filter Oxygen aluminium oxide Activated Copper oxide Manganese dioxide nickel monoxide | 1344-28-1<br>1317-38-0<br>1313-13-9<br>1313-99-1 | ≥75 - <90<br>≥5 - <10<br>≥5 - <10<br>≥0.3 - <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 (SiO2); SILICA, QUARTZ; QUARTZ (SiO2)

Pennsylvania : The following components are listed: ALUMINUM OXIDE (AL2O3); COPPER

COMPOUNDS; MANGANESE COMPOUNDS; NICKEL OXIDE (NIO); CRISTOBALITE

(SIO2); QUARTZ (SIO2)

#### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

| Ingredient name  | Cancer       | Reproductive | No significant risk level | Maximum acceptable dosage level |
|--|--------------|--------------|---------------------------|---------------------------------|
| Gas Clean Filter Oxygen<br>nickel monoxide<br>Sulphuric acid                       | Yes.<br>Yes. | No.<br>No.   | No.<br>No.                | No.<br>No.                      |
| Gas Clean Filter Moisture<br>crystalline silica, respirable powder<br>cristobalite | Yes.<br>Yes. | No.<br>No.   | No.<br>No.                | No.<br>No.                      |

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# **Section 15. Regulatory information**

**Canada inventory** 

**International regulations** 

International lists

: All components are listed or exempted.

: Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted.

**Japan inventory**: All components are listed or exempted.

Korea inventory: Not determined.

Malaysia Inventory (EHS Register): All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): Not determined.

Taiwan inventory (CSNN): All components are listed or exempted.

**Chemical Weapons** 

**Convention List Schedule** 

**I Chemicals** 

**Chemical Weapons** 

**Convention List Schedule** 

II Chemicals

**Chemical Weapons** 

**Convention List Schedule** 

**III Chemicals** 

: Not listed

: Not listed

: Not listed

### Section 16. Other information

**History** 

**Date of issue** : 10/28/2015 Date of previous issue : 8/30/2013

Version

Indicates information that has changed from previously issued version.

#### **Notice to reader**

Disclaimer: The information contained in this document is based on the manufacturer'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.

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