



# Safety Data Sheet

according to WHS Regulations

Print date: 23.02.2024

Revision date: 23.02.2024

## 1 Identification

**Product Name: MOLECULAR SIEVE TYPE 3A****Other Means of Identification:** Article**Recommended Use of the Chemical and Restriction on Use:**

As a desiccant adsorbing moisture in compressed air supplies, dehumidifiers and dry air purging systems and as a static moisture absorber for general moisture adsorbing applications.

**Details of Manufacturer or Importer:**

Enviro-Tronics  
Unit 3, 175 Briens Rd  
Northmead NSW 2152

**Phone Number:** 02 9630 5277**Emergency telephone number:** 0413 943 153

## 2 Hazard(s) Identification

**Hazardous Nature:**

Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

This product is considered as article and is as such exempted from the UN-GHS classification requirements.

The classification based on the hazardous substances contained in the product is provided below for information purposes only.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition), IATA and IMDG/IMSBC.



Health hazard

Carcinogenicity 1A

H350i May cause cancer by inhalation.

STOT RE 1

H372 Causes damage to organs through prolonged or repeated exposure.



Skin Corrosion/Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A

H319 Causes serious eye irritation.

**Signal Word** Danger**Hazard Statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H350i May cause cancer by inhalation.

H372 Causes damage to organs through prolonged or repeated exposure.

**Precautionary Statements**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

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P321	Specific treatment (see on this label).
P314	Get medical advice/attention if you feel unwell.
P362+P364	Take off contaminated clothing and wash it before reuse.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

### 3 Composition and Information on Ingredients

#### Chemical Characterization: Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.

#### Hazardous Components:

CAS: 7631-86-9	Silica ⚠ Carcinogenicity 1A, H350i; STOT RE 1, H372	<60%
CAS: 1313-59-3	Sodium oxide ⚠ Oxidising Solids 1, H271; ⚠ Skin Corrosion/Irritation 1B, H314; Eye Damage 1, H318	<30%
CAS: 12136-45-7	Dipotassium oxide ⚠ Skin Corrosion/Irritation 1B, H314	<15%

#### Non Hazardous Components:

CAS: 1344-28-1	Aluminium oxide (Al <sub>2</sub> O <sub>3</sub> )	<40%
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#### Additional information:

The value given for silica represents the total value, not the respirable fraction.

The solid product as supplied is classified as non-hazardous under normal conditions. However, dust created when the product is cut, ground, machined, or sanded contains crystalline silica, some of which may be respirable (particles small enough to go into deep parts of the lung when breathed in). Respirable crystalline silica is a known carcinogen and can cause serious lung damage. Exposure to this product is not likely to cause harm, provided controls described in section 8 of this SDS are in place. It is recommended to determine the actual exposure through workplace testing.

### 4 First Aid Measures

#### Inhalation:

If dust or solution is inhaled, remove to fresh air. Seek medical attention if breathing problems develop.

#### Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if irritation persists.

#### Eye Contact:

In case of eye contact, rinse with water for several minutes, including under eyelids. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention if irritation persists.

#### Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give 1-2 glasses of water to drink in small sips. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

#### Symptoms Caused by Exposure:

**Inhalation:** Dust may cause respiratory irritation, coughing and chest pain. High levels of exposure may cause fatigue, chest pain, shortness of breath and lung damage.

**Skin Contact:** Causes serious skin irritation. This product becomes hot in contact with water and can cause thermal burns.

**Eye Contact:** Causes serious eye irritation. This product becomes hot in contact with water and can cause thermal burns.

**Ingestion:** May cause burns or irritation to the mouth, throat and stomach. This product becomes hot in contact with water and can cause thermal burns.

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## 5 Fire Fighting Measures

**Suitable Extinguishing Media:** Use foam, dry chemical or carbon dioxide. Do NOT use water.

**Specific Hazards Arising from the Chemical:**

Hazardous combustion products include unidentified toxic fumes.

Product is not flammable.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Minimise run-off from fire fighting entering drains or water courses.

**Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

## 6 Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear approved dust/particulate filter respirator and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation. Avoid generating dust.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:**

Stop leak if safe to do so and sweep granules into a pile and shovel into drums for subsequent disposal. Avoid generating dust. Provide adequate ventilation. Decontaminate spill area with detergent and water.

## 7 Handling and Storage

**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust. Avoid generating dust.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from physical damage and moisture. This product becomes hot in contact with water. Keep away from water, halocarbons, ethylene oxide, oxygen difluoride, vinyl acetate, strong oxidizing agents, magnesium, manganese trifluoride, sodium, xenon hexafluoride and hydrofluoric acid.

## 8 Exposure Controls and Personal Protection

**Exposure Standards:**

**CAS: 7631-86-9 Silica**

WES	TWA: 2 mg/m <sup>3</sup>
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**CAS: 1344-28-1 Aluminium oxide (Al<sub>2</sub>O<sub>3</sub>)**

WES	TWA: 10 mg/m <sup>3</sup> inhalable dust
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**Engineering Controls:**

Ensure adequate ventilation of the working area, keeping airborne concentrations below occupational exposure standards.

**Respiratory Protection:**

Where an inhalation risk exists, wear approved particulate respirator (filter type P). At high dust levels, wear a powered air purifying respirator (PAPR) with P3 filter or an air-line respirator or a full-face P3 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

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**Skin Protection:**

Rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information.

When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

**Eye and Face Protection:**

Eye and face protectors for protection against dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

### 9 Physical and Chemical Properties

**Appearance:**

<b>Form:</b>	Solid
<b>Colour:</b>	Tan
<b>Odour:</b>	Odourless
<b>Odour Threshold:</b>	No information available
<b>pH-Value:</b>	8-11
<b>Melting point/freezing point:</b>	No information available
<b>Initial Boiling Point/Boiling Range:</b>	No information available
<b>Flash Point:</b>	Not applicable
<b>Flammability (solid, gas):</b>	Not flammable
<b>Auto-ignition Temperature:</b>	No information available
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	No information available
<b>Upper:</b>	No information available
<b>Vapour Pressure:</b>	Not applicable
<b>Density at 20 °C:</b>	0.5-0.8 g/cm <sup>3</sup>
<b>Vapour Density:</b>	Not applicable
<b>Evaporation Rate:</b>	Not applicable
<b>Solubility in Water:</b>	Reacts with water
<b>Partition Coefficient (n-octanol/water):</b>	No information available
<b>Viscosity:</b>	No information available

### 10 Stability and Reactivity

**Possibility of Hazardous Reactions:** This product becomes hot in contact with water.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of storage and use.

**Conditions to Avoid:** Moisture.

**Incompatible Materials:**

Water, halocarbons, ethylene oxide, oxygen difluoride, vinyl acetate, strong oxidizing agents, magnesium, manganese trifluoride, sodium, xenon hexafluoride and hydrofluoric acid.

**Hazardous Decomposition Products:** Unidentified toxic fumes.

### 11 Toxicological Information

**Toxicity:****LD50/LC50 Values:****CAS: 7631-86-9 Silica**

Oral	LD50	10,000 mg/kg (Rattus norvegicus (rat))
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<b>CAS: 1344-28-1 Aluminium oxide (Al<sub>2</sub>O<sub>3</sub>)</b>		
Oral	LD50	>80 mg/kg (Rattus norvegicus (rat))

**Acute Health Effects****Inhalation:**

Dust may cause respiratory irritation, coughing and chest pain. High levels of exposure may cause fatigue, chest pain, shortness of breath and lung damage.

**Skin:**

Causes serious skin irritation. This product becomes hot in contact with water and can cause thermal burns.

**Eye:**

Causes serious eye irritation. This product becomes hot in contact with water and can cause thermal burns.

**Ingestion:**

May cause burns or irritation to the mouth, throat and stomach. This product becomes hot in contact with water and can cause thermal burns.

**Skin Corrosion / Irritation:** Causes skin irritation.

**Serious Eye Damage / Irritation:** Causes serious eye irritation.

**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.

**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.

**Carcinogenicity:**

May cause cancer by inhalation.

Silica, amorphous is classified by IARC as Group 3 - Not classifiable as to its carcinogenicity to humans.

**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Causes damage to organs through prolonged or repeated exposure.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.

**Chronic Health Effects:**

The prolonged and repeated exposure (by inhalation) to respirable (crystalline) silica cause silicosis, a debilitating lung disease. The crystalline silica dust is practically insoluble in body fluids and can be deposited in lungs. Cigarette smoking can reduce the clearance of crystalline silica. The data indicate that the relative lung cancer risk is increased for people with silicosis.

**Existing Conditions Aggravated by Exposure:** No data available.

## 12 Ecological Information

**Ecotoxicity:****Aquatic toxicity:**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Persistence and Degradability:** No data available on finished product.

**Bioaccumulative Potential:** No data available on finished product.

**Mobility in Soil:** No data available on finished product.

**Other adverse effects:** No further relevant information available.

## 13 Disposal Considerations

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

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**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

**14 Transport Information****UN Number** Not regulated**Proper Shipping Name** Not regulated**Dangerous Goods Class** Not regulated**Packing Group:** Not regulated**15 Regulatory Information****Australian Inventory of Industrial Chemicals:**

All ingredients are listed.

**Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:**

Not a scheduled poison.

**16 Other Information****Date of Preparation or Last Revision:** 23.02.2024**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)**Abbreviations and acronyms:**

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Oxidising Solids 1: Oxidising solids, Hazard Category 1

Skin Corrosion/Irritation 1B: Skin corrosion/irritation – Category 1B

Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2

Eye Damage 1: Serious eye damage/eye irritation – Category 1

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Carcinogenicity 1A: Carcinogenicity – Category 1A

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

**Disclaimer**

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020”.

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