



Safety Data Sheet

according to WHS Regulations

Printing date 09.05.2019

Revision: 09.05.2019

1 Identification

Product Name: MOLECULAR SIEVE TYPE 4A**Other Means of Identification:** Mixture**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 adsorber 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:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



corrosion

Skin Corrosion/Irritation 1B H314 Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.

Signal Word Danger**Hazard Statements**

H314 Causes severe skin burns and eye damage.

Precautionary Statements

P260 Do not breathe dusts or mists.

P264 Wash hands thoroughly after handling.

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

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

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

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Hazardous Components:		
CAS: 7631-86-9	Silica ☠ Carcinogenicity 1A, H350i; STOT RE 1, H372	<60%
CAS: 1344-28-1	Aluminium oxide (Al ₂ O ₃)	<40%
CAS: 1313-59-3	Sodium oxide ☠ Skin Corrosion/Irritation 1B, H314; Serious Eye Damage/Irritation 1, H318	<40%
CAS: 1309-48-4	Magnesium oxide	<5%

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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 symptoms occur.

Eye Contact:

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

Ingestion:

If swallowed, do not induce vomiting. If the victim is alert give water to rinse mouth thoroughly and then 2 to 4 glasses of water to drink and dilute. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation, coughing and chest pain. High levels of exposure may cause fatigue, chest pain, shortness of breath and lung damage. Inhalation of a large quantity magnesium oxide may cause a feverish reaction and leukocytosis.

Skin Contact: Causes severe skin burns. Becomes hot in contact with moisture and can cause thermal burns.

Eye Contact: Causes serious eye damage. Becomes hot in contact with moisture 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.

5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical and sand.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include toxic fumes.

Not combustible. Will not burn or support combustion.

Containers close to fire should be removed only if safe to do so.

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/mist 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.

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Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and sweep into a pile and shovel into drums for subsequent disposal. Avoid generating dust. Provide adequate ventilation. Wash site of spillage thoroughly with water and detergent.

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. Prevent formation of dust.

Empty containers may contain hazardous residues; treat with caution.

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 and when empty.

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**NES | TWA: 2 mg/m³**CAS: 1344-28-1 Aluminium oxide (Al₂O₃)**NES | TWA: 10 mg/m³**CAS: 1309-48-4 Magnesium oxide**NES | TWA: 10 mg/m³**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

Respiratory Protection:

Where an inhalation risk exists, wear a Class P1 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

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:**Form:**

Solid

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Colour:	Tan
Odour:	Odourless
Odour Threshold:	Not determined.
pH-Value:	8 - 11
Melting point/freezing point:	Not determined.
Initial Boiling Point/Boiling Range:	Not determined.
Flash Point:	Not applicable
Flammability:	Non combustible solid.
Auto-ignition Temperature:	Not determined.
Decomposition Temperature:	Not determined.
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure:	Not applicable.
Density at 20 °C:	0.5 - 0.8 g/cm ³
Vapour Density:	Not applicable.
Evaporation Rate:	Not applicable
Solubility in Water:	Insoluble
Partition Coefficient (n-octanol/water):	No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions:

Hazardous polymerisation will not occur.

This product becomes hot in contact with water.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.**Conditions to Avoid:** Excessive 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: Toxic fumes.

11 Toxicological Information

Toxicity:**LD₅₀/LC₅₀ Values Relevant for Classification:****CAS: 7631-86-9 Silica**Oral LD₅₀ 10000 mg/kg (rat)**CAS: 1344-28-1 Aluminium oxide (Al₂O₃)**Oral LD₅₀ >5000 mg/kg (rat)**Acute Health Effects****Inhalation:**

May cause respiratory irritation, coughing and chest pain. High levels of exposure may cause fatigue, chest pain, shortness of breath and lung damage. Inhalation of a large quantity magnesium oxide may cause a feverish reaction and leukocytosis.

Skin: Causes severe skin burns. Becomes hot in contact with moisture and can cause thermal burns.**Eye:** Causes serious eye damage. Becomes hot in contact with moisture 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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Skin Corrosion / Irritation: Causes severe skin burns.**Serious Eye Damage / Irritation:** Causes serious eye damage.**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:**

Silica, amorphous is classified by IARC as a 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:

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

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

Prolonged or repeated exposure to aluminium oxide or to silica may cause respiratory sensitivity, lung damage, pulmonary fibrosis or silicosis.

Ingestion of aluminium salts over long periods can cause phosphate deficiency, based on human and animal information.

Existing Conditions Aggravated by Exposure: No information available**Additional toxicological information:** No information available

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:** No further relevant information available.**Persistence and Degradability:** No further relevant information available.**Bioaccumulative Potential:** No further relevant information available.**Mobility in Soil:** No further relevant information available.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

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

14 Transport Information

**UN Number
ADG, IMDG, IATA**

UN1759

**Proper Shipping Name
ADG, IMDG, IATA**

CORROSIVE SOLID, N.O.S. (Sodium oxide)

**Dangerous Goods Class
ADG Class:**

8 Corrosive substances.

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Packing Group: ADG, IMDG, IATA	II
EMS Number:	F-A,S-B
Hazchem Code:	2X
Special Provisions:	274
Limited Quantities:	1 kg
Packagings & IBCs - Packing Instruction:	P002, IBC08
Packagings & IBCs - Special Packing Provisions:	B2, B4
Portable Tanks & Bulk Containers - Instructions:	T3
Portable Tanks & Bulk Containers - Special Provisions:	TP33

15 Regulatory Information

Australian Inventory of Chemical Substances:

CAS: 7631-86-9	Silica
CAS: 1344-28-1	Aluminium oxide (Al ₂ O ₃)
CAS: 1313-59-3	Sodium oxide
CAS: 1309-48-4	Magnesium oxide

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:
Not Scheduled.

16 Other Information

Date of Preparation or Last Revision: 09.05.2019**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 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)
 Skin Corrosion/Irritation 1B: Skin corrosion/irritation – Category 1B
 Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1
 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 - February 2016"

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product is used.