

# Safety Data Sheet



## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** Granular Activated Carbon RIAS-2100

**Recommended Use of the Chemical and Restrictions on Use** Adsorbant for sulfur dioxide removal.

**Supplier:** Ixom Operations Pty Ltd (Incorporated in Australia)  
**NZBN:** 9429041465226  
**Street Address:** 166 Totara Street  
Mt Maunganui South  
New Zealand

**Telephone Number:** +64 9 368 2700  
**Facsimile:** +64 9 368 2710  
**Emergency Telephone:** **0 800 734 607 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land. This product has been tested according to "United Nations Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria Part III - 33.3.1.3" and is not classified as a Class 4.2 dangerous good.

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

**SIGNAL WORD:** WARNING

**Subclasses:**

Subclass 6.4 Category A - Substances that are irritating to the eye.  
Subclass 6.9 - Substances that are respiratory tract irritants.

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2006  
Approval Number: HSR002503



**Hazard Statement(s):**

H320 Causes eye irritation.  
H335 May cause respiratory irritation.

**Precautionary Statement(s):**

**Prevention:**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.

**Response:**

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.

*Product Name:* Granular Activated Carbon RIAS-2100  
*Substance No:* 000000053296

*Issued:* 09/02/2017  
*Version:* 2

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## Storage:

P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

## Disposal:

P501 In case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Activated carbon (steam processed coconut shell based)	7440-44-0	>=75%	H320 H335
Magnesium oxide	1309-48-4	to 100%	-

## 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

### Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek immediate medical advice.

### Skin Contact:

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

### Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

### Ingestion:

Rinse mouth with water. If swallowed, give a glass of water to drink. If vomiting occurs give further water. Seek medical advice.

### Indication of immediate medical attention and special treatment needed:

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

### Suitable Extinguishing Media:

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

### Unsuitable Extinguishing Media:

None known.

### Specific hazards arising from the chemical:

Combustible solid. Magnesium oxide may ignite and explode when heated with sublimed sulfur, magnesium powder or aluminium powder. It reacts violently with interhalogens and produces fumes.

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## Special protective equipment and precautions for fire-fighters:

On burning will emit toxic fumes, including those of oxides of carbon . Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Since wet carbon adsorbs oxygen, do not enter closed vessels without using self-contained breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

### Emergency procedures/Environmental precautions:

Clear area of all unprotected personnel. Shut off all possible sources of ignition. If contamination of sewers or waterways has occurred advise local emergency services.

### Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. Use non-sparking tools.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation.

**Conditions for safe storage, including any incompatibilities:** Store in a cool, dry, well ventilated place. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Protect from moisture. Keep containers closed when not in use - check regularly for spills.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Workplace Exposure Standards:** No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for constituent(s):

Magnesium oxide fume: 8hr WES-TWA = 10 mg/m<sup>3</sup>

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

### Appropriate engineering controls:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

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## Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.



Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Air-purifying respirators do not protect workers in oxygen deficient atmospheres. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Solid
<b>Colour:</b>	Black
<b>Odour:</b>	Odourless
<b>Solubility:</b>	Practically insoluble in water.
<b>Specific Gravity:</b>	0.30-0.64 g/cm <sup>3</sup> (Bulk density)
<b>Relative Vapour Density (air=1):</b>	Not applicable
<b>Vapour Pressure (20 °C):</b>	Not applicable
<b>Flash Point (°C):</b>	Not applicable
<b>Flammability Limits (%):</b>	Not available
<b>Autoignition Temperature (°C):</b>	>350 (steam activated carbon)
<b>Melting Point/Range (°C):</b>	Not available
<b>pH:</b>	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No information available.
<b>Chemical stability:</b>	Stable under normal conditions of use.
<b>Possibility of hazardous reactions:</b>	Hazardous polymerisation will not occur.
<b>Conditions to avoid:</b>	Avoid dust generation. Avoid exposure to moisture. Avoid contact with strong acids.
<b>Incompatible materials:</b>	Incompatible with strong oxidising agents. Incompatible with interhalogens .
<b>Hazardous decomposition products:</b>	Oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

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No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Ingestion:** No adverse effects expected, however, large amounts may cause nausea and vomiting.

**Eye contact:** A mild eye irritant.

**Skin contact:** Contact with skin may result in irritation.

**Inhalation:** Breathing in dust will result in respiratory irritation.

**Acute toxicity:** No LD50 data available for the product.

**Chronic effects:** Not listed as carcinogenic according to the International Agency for Research on Cancer (IARC).

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Avoid contaminating waterways.

## 13. DISPOSAL CONSIDERATIONS

### **Disposal methods:**

Refer to local government authority for disposal recommendations. Dispose of contents/container in accordance with local/regional/national/international regulations.

## 14. TRANSPORT INFORMATION

### **Road and Rail Transport**

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land. This product has been tested according to "United Nations Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria Part III - 33.3.1.3" and is not classified as a Class 4.2 dangerous good.

### **Marine Transport**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

### **Air Transport**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

## 15. REGULATORY INFORMATION

### **Classification:**

Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

### **Subclasses:**

Subclass 6.4 Category A - Substances that are irritating to the eye.

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**Hazard Statement(s):**

H320 Causes eye irritation.

H335 May cause respiratory irritation.

## 16. OTHER INFORMATION

Supplier Material Safety Data Sheet; 08/ 2013.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

**Reason(s) for Issue:**

Product Name change

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.