1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: SULPHUR POWDER

Other name(s): Sulfur powder; Atomic sulphur; Dusting sulphur; Sulphur MC2; Sulphur MC2 Oiled.

Recommended Use of the Chemical and Restrictions on Use
Rubber industries, pesticides, fireworks.

Supplier: Ixom Operations Pty Ltd
ABN: 51 600 546 512
Street Address: Level 8, 1 Nicholson Street
East Melbourne Victoria 3002 Australia

Telephone Number: +61 3 9906 3000
Emergency Telephone: 1 800 033 111 (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

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:
Flammable solids - Category 2
Skin Irritation - Category 2

SIGNAL WORD: WARNING

Hazard Statement(s):
H228 Flammable solid.
H315 Causes skin irritation.

Precautionary Statement(s):

Prevention:
P210 Keep away from heat, sparks, open flames, hot surfaces. No smoking.
P240 Ground or bond container and receiving equipment.
P241 Use explosion-proof electrical, ventilating, lighting equipment.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves / protective clothing / eye protection / face protection.

Response:
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P370+P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.
Safety Data Sheet

Storage:
No storage statements.

Disposal:
No disposal statements.

Poisons Schedule (SUSMP):  None allocated.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>Proportion</th>
<th>Hazard Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur</td>
<td>7704-34-9</td>
<td>&gt;95%</td>
<td>H315</td>
</tr>
<tr>
<td>Other ingredient(s)</td>
<td>-</td>
<td>0-&lt;5%</td>
<td>-</td>
</tr>
<tr>
<td>Magnesium carbonate</td>
<td>546-93-0</td>
<td>0-&lt;5%</td>
<td>-</td>
</tr>
</tbody>
</table>

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 medical advice if effects persist.

Skin Contact:
If skin or hair contact occurs, remove contaminated clothing and wash skin and hair with soap and water. Seek immediate medical assistance.

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. Never give anything by the mouth to an unconscious patient. 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:
Solid water jet/stream may scatter and spread the fire.

Hazchem or Emergency Action Code:  1Z

Specific hazards arising from the chemical:
Flammable solid. Avoid all ignition sources.
Special protective equipment and precautions for fire-fighters:
On burning will emit toxic fumes, including those of oxides of sulfur. Can melt and flow in a fire situation. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:
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 a spark-free shovel.

7. HANDLING AND STORAGE

Precautions for safe handling:
Avoid skin and eye contact and breathing in dust. In common with many organic chemicals, may form flammable dust clouds in air. For precautions necessary refer to Safety Data Sheet "Dust Explosion Hazards". Take precautionary measures against static discharges.

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. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Magnesite (Magnesium carbonate): 8hr TWA = 10 mg/m³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

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.
Safety Data Sheet

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. 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Powder</td>
</tr>
<tr>
<td>Colour:</td>
<td>Lemon Yellow</td>
</tr>
<tr>
<td>Odour:</td>
<td>Odourless</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Negligible solubility in water.</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>2.07 @25°C</td>
</tr>
<tr>
<td>Relative Vapour Density (air=1):</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour Pressure (20 °C):</td>
<td>0.00021 Pa @25°C</td>
</tr>
<tr>
<td>Flash Point (°C):</td>
<td>218 @761 mmHg</td>
</tr>
<tr>
<td>Flammability Limits (%):</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition Temperature (°C):</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point/Range (°C):</td>
<td>113</td>
</tr>
<tr>
<td>Boiling Point/Range (°C):</td>
<td>445</td>
</tr>
<tr>
<td>Decomposition Point (°C):</td>
<td>Not available</td>
</tr>
<tr>
<td>pH:</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: Corrosive to steel. Reacts violently with oxidising agents.

Chemical stability: Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

 Possibility of hazardous reactions: Dust explosion hazard. Corrosive to damp steel.

Conditions to avoid: Avoid dust generation. Avoid exposure to heat, sources of ignition, and open flame.

Incompatible materials: Incompatible with oxidising agents, reducing agents, bases, halides, flammable materials, metal oxides, metal salts, strong acids.

Hazardous decomposition products: Sulfur dioxide.

Product Name: SULPHUR POWDER
Substance No: 000034459301

Issued: 21/03/2014
Version: 6
11. TOXICOLOGICAL INFORMATION

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:** Swallowing can result in nausea, vomiting, diarrhoea, and gastrointestinal irritation.

**Eye contact:** May be an eye irritant.

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

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

**Acute toxicity:**
- Oral LD50 (rat): >2000 mg/kg
- Dermal LD50 (rat): >2000 mg/kg

**Respiratory or skin sensitisation:** Not a skin sensitisir.

**Chronic effects:**
- Mutagenicity: No information available.
- Carcinogenicity: No information available.
- Reproductive toxicity: No information available.
- Specific Target Organ Toxicity (STOT) - single exposure: No information available.
- Specific Target Organ Toxicity (STOT) - repeated exposure: No information available.
- Aspiration hazard: No information available.

12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Avoid contaminating waterways.

13. DISPOSAL CONSIDERATIONS

**Disposal methods:**
Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

14. TRANSPORT INFORMATION

**Road and Rail Transport**
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

**UN No:** 1350
Transport Hazard Class: 4.1 Flammable Solid  
Packing Group: III  
Proper Shipping Name or Technical Name: SULPHUR  
Hazchem or Emergency Action Code: 1Z  

Marine Transport  
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.  
UN No: 1350  
Transport Hazard Class: 4.1 Flammable Solid  
Packing Group: III  
Proper Shipping Name or Technical Name: SULPHUR  
IMDG EMS Fire: F-A  
IMDG EMS Spill: S-G  

Air Transport  
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.  
UN No: 1350  
Transport Hazard Class: 4.1 Flammable Solid  
Packing Group: III  
Proper Shipping Name or Technical Name: SULPHUR  

15. REGULATORY INFORMATION  

Classification:  
This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.  

Classification of the chemical:  
Flammable solids - Category 2  
Skin Irritation - Category 2  

Hazard Statement(s):  
H228 Flammable solid.  
H315 Causes skin irritation.  

Poisons Schedule (SUSMP): None allocated.  

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).  

16. OTHER INFORMATION  
Supplier Safety Data Sheet; 10/ 2013.  

Product Name: SULPHUR POWDER  
Substance No: 00003449301  
Issued: 21/03/2014  
Version: 6
Safety Data Sheet

Reason(s) for Issue:
Revised Primary SDS
Change in Formulation
Change in Exposure Controls
Change in Engineering Control Measures

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.