Section 1 - Identification of Material and Supplier

Chemical Nature: Magnesium Sulphate
Trade Name: KIESERITE
Product Use: Fertiliser
Supplier: Amgrow Pty Ltd
Unit B2a, 3-29 Birnie Avenue
Lidcombe NSW 2141
Phone: (02) 9395 1200 (Office hours), Fax: (02) 9395 1241
www.amgrow.com.au
Creation Date: December 2016 (valid for 5 years from this date)

Section 2 - Hazards Identification

Statement of Hazardous Nature

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SWA
NOT A DANGEROUS GOOD ACCORDING TO THE ADG CODE, IATA OR IMDG/IMSBC CRITERIA

Risk Phrases: Not Hazardous - No criteria found.
Safety Phrases: Not Hazardous - No criteria found.
SUSMP Classification: S5
ADG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.
UN Number: None allocated

GHS Signal word: NONE. Not hazardous.

PREVENTION
P102: Keep out of reach of children.
P262: Do not get in eyes, on skin, or on clothing.
P281: Use personal protective equipment as required.

RESPONSE
P353: Rinse skin or shower with water.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P370+P378: Not combustible. Use extinguishing media suited to burning materials.

STORAGE
P402+P404: Store in a dry place. Store in a closed container.

DISPOSAL
P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Emergency Overview
Physical Description & colour: White/cream granular solid
Odour: No odour
Major Health Hazards: No significant risk factors have been found for this product in normal use.

Section 3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Conc %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesium Sulphate</td>
<td>7487-88-9</td>
<td>100</td>
</tr>
</tbody>
</table>

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.
Section 4 - First Aid Measures

General Information: You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: Inhalation is not normally harmful. Recovery is rapid after removal from exposure. If symptoms are experienced, remove victim to fresh air.

Skin Contact: Remove contaminated clothing and wash thoroughly with soap and water. Seek medical attention if irritation develops. Launder clothing before reuse.

Eye Contact: Hold eye open and flush gently with copious amounts of water for 15 minutes. Seek medical attention if irritation develops.

Ingestion: If swallowed in large quantities, immediately rinse mouth out with water. Give water. Contact Poisons Information Centre or doctor. Do not induce vomiting unless advised to do so.

Advice to Doctor: Treat symptomatically

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Fire decomposition products from this product are likely to be irritating if inhaled.

Extinguishing Media: Not combustible. Use extinguishing media suited to burning materials.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: Does not burn.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Auto ignition temperature: Not applicable - does not burn.

Flammability Class: Does not burn.

Section 6 - Accidental Release Measures

Accidental release: For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services. This material may be suitable for approved landfill.

Section 7 - Handling and Storage

Handling: Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

Storage: Store in cool, dry area removed from foodstuffs. Ensure containers are labelled, protected from physical damage and sealed when not in use. Do not allow to come into contact with water either from rain, condensation or the surface on which it is stored. Bagged fertilisers should be stored under cover and out of direct sunlight. Store away from farm chemicals e.g. insecticides, fungicides and herbicides.

Section 8 - Exposure Controls and Personal Protection

<table>
<thead>
<tr>
<th>Exposure Limits</th>
<th>TWA (mg/mP3P)</th>
<th>STEL (mg/mP3P)</th>
<th>ADI (mg/Kg/day)</th>
<th>NOEL (mg/Kg/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>31</td>
<td>766</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exposure limits have not been set by SWA for other ingredients in product. The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. There is a blanket limit of 10mg/m$^3$ for dusts or mists when limits have not otherwise been established. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term “peak” is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, 31st March 2012

Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** Avoid high dust concentration and provide local exhaust ventilation where necessary.

**Eye Protection:** Eye protection such as protective glasses or goggles is recommended.

**Skin Protection:** Wear gloves or gauntlets and long sleeves when using this product to protect against skin irritation.

**Respirator:** Use P2 type canister respirator where high concentrations of airborne dust is present.

Provision of eye wash facilities and safety shower recommended.

Wash hands before eating, drinking, smoking or going to toilet, launder protective clothing before re-use.

### Section 9 - Physical and Chemical Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Description &amp; colour</td>
<td>White/cream granular solid</td>
</tr>
<tr>
<td>Odour</td>
<td>No odour</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing/Melting Point</td>
<td>No data</td>
</tr>
<tr>
<td>Density</td>
<td>1.97-2.4</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water and glycerol. Practically insoluble in alcohol</td>
</tr>
<tr>
<td>pH</td>
<td>No data</td>
</tr>
<tr>
<td>Volatility</td>
<td>Negligible at normal ambient temperatures.</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Coeff Oil/water Distribution</td>
<td>No data</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto ignition temp</td>
<td>Not applicable - does not burn</td>
</tr>
</tbody>
</table>

### Section 10 - Stability and Reactivity

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions.

**Conditions to Avoid:** Heat, flames.

**Incompatibilities:** no special incompatibilities

**Fire Decomposition Products:** Decomposition may give rise to toxic and noxious fumes

**Polymerisation:** This product is unlikely to undergo polymerisation processes.

### Section 11 - Toxicological Information

**Target Organs:** There is no data to hand indicating any particular target organs.

**Potential Health Effects**

**Inhalation:** If product in high concentrations of airborne dust, prolonged contact may cause irritation to the nose and throat.

**Skin Contact:** Non irritant.

**Eye Contact:** Can cause mild irritation to eyes

**Ingestion:** Low toxicity. With large doses, ingestion may result in diarrhoea

**Carcinogen Status:**

**SWA:** No significant ingredient is classified as carcinogenic by SWA.

**NTP:** No significant ingredient is classified as carcinogenic by NTP.

**IARC:** No significant ingredient is classified as carcinogenic by IARC.

**Classification of Hazardous Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Risk Phrases</th>
</tr>
</thead>
</table>

No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.

### Section 12 - Ecological Information

**Environment:** Avoid contamination of waterways.

**Ecotoxicity effects:** No data

**Persistence/degradation:** No data
**Section 13 - Disposal Considerations**

**Disposal:** Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service. This product can usually be used for its intended purpose unless contaminated by substances that make it unsuited.

**Section 14 - Transport Information**

**UN Number:** This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

**Section 15 - Regulatory Information**

**AICS:** All of the significant ingredients in this formulation are compliant with NICNAS regulations.

**Section 16 - Other Information**

This SDS contains only safety-related information. For other data see product literature.

**Acronyms:**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADG Code</td>
<td>Australian Code for the Transport of Dangerous Goods by Road and Rail</td>
</tr>
<tr>
<td>AICS</td>
<td>Australian Inventory of Chemical Substances</td>
</tr>
<tr>
<td>ASCC</td>
<td>Australian Safety &amp; Compensation Council</td>
</tr>
<tr>
<td>CAS number</td>
<td>Chemical Abstracts Service Registry Number</td>
</tr>
<tr>
<td>Hazchem Number</td>
<td>Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Authority</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods</td>
</tr>
<tr>
<td>IMSBC</td>
<td>International Maritime Solid Bulk Code</td>
</tr>
<tr>
<td>NOHSC</td>
<td>National Occupational Health and Safety Commission</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program (USA)</td>
</tr>
<tr>
<td>R-Phrase</td>
<td>Risk Phrase</td>
</tr>
<tr>
<td>SUSMP</td>
<td>Standard for the Uniform Scheduling of Medicines &amp; Poisons</td>
</tr>
<tr>
<td>SWA</td>
<td>Safe Work Australia (formerly ASCC and NOHSC)</td>
</tr>
<tr>
<td>UN Number</td>
<td>United Nations Number</td>
</tr>
</tbody>
</table>

**THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.**

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document “Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice” (December 2011)

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Issued by: Amgrow Pty Ltd

Phone: (02) 9395 1200 (office hours)

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)