Section 1 - Identification of the Material and Supplier

- **Trade Name:** BARMAC METALAXYL FUNGICIDE GRANULES
- **Other Names:** Metalaxyl Granular
- **APVMA Code:** 82911
- **Product Use:** Agricultural systemic fungicide for use as described on the product label.
- **Supplier:** Barmac (a division of Amgrow Australia Pty Ltd)
  
  3/29 Birnie Ave, Lidcombe NSW 2141
  
  Phone: 02 9395 1200 (office hours), Fax: 02 9395 1241
  
  www.amgrow.com.au

- **Creation Date:** March 2017
- **Poisons Information Centre:** Phone 13 1126 from anywhere in Australia

Section 2 - Hazards Identification

Statement of Hazardous Nature

THIS PRODUCT IS CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SWA.

NOT A DANGEROUS GOOD ACCORDING TO CRITERIA OF ADG, IATA, OR IMDG CODES

- **SUSMP Classification:** S5
- **ADG Classification:** None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code,

GHS Signal word: WARNING

Acute Toxicity – Category 4
Skin Sensitisation – Category 1
Hazardous To the Aquatic Environment (Chronic) – Category 3

HAZARD STATEMENT:

- H302: Harmful if swallowed
- H317: May cause an allergic skin reaction
- H412: Harmful to aquatic life with long lasting results

PREVENTION

- P102: Keep out of reach of children.
- P103: Read Label before use
- P261: Avoid breathing dust
- P264: Wash all contacted areas thoroughly
- P270: Do not eat, drink or smoke when using this product
- P272: Contaminated work clothing should not be allowed out of the workplace
- P273: Avoid release to the environment
- P280: Wear protective gloves

RESPONSE

- P301+P312+P330: IF SWALLOWED: Call a POISON CENTRE/ doctor if you feel unwell, Rinse mouth
- P302+P352: IF ON SKIN: Wash with plenty of soap and water
- P333+P313: If skin irritation or rash occurs: get medical advice/attention.
- P362+P364: Take off contaminated clothing and wash it before reuse
- P308+P313 If exposed or concerned: get medical advice/attention.

STORAGE

- P403+P233: Store in a well ventilated place. Keep container tightly closed

DISPOSAL

- P501: Dispose of contents and containers as specified on the registered label.
Emergency Overview

Physical Description & Colour: Cream to grey granules
Odour: No appreciable odour
Major Health Hazards: May cause allergic skin reaction

Section 3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Conc. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metalaxyl</td>
<td>57837-19-1</td>
<td>5</td>
</tr>
<tr>
<td>Other non hazardous ingredients</td>
<td></td>
<td>to 100</td>
</tr>
</tbody>
</table>

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: Remove source of contamination or move victim to fresh air. Keep comfortable for breathing. Call Poisons centre or doctor if symptoms persist.

Skin Contact: Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed.

Eye Contact: Flush contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Ingestion: If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call a doctor.

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 may be toxic

Extinguishing Media: Water fog or fine spray, foam, dry chemical

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

Flash point: Not flammable

Upper Flammability Limit: Not relevant

Lower Flammability Limit: Not relevant

Auto ignition temperature: Not relevant

Flammability Class: Not relevant

Section 6 - Accidental Release Measures

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses and keep personnel away. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.
Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under “Storage” should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under “Incompatibilities” in Section 10.

Section 8 - Exposure Controls and Personal Protection

<table>
<thead>
<tr>
<th>Exposure Limits</th>
<th>TWA (mg/m3)</th>
<th>STEL (mg/m3)</th>
<th>ADI (mg/Kg/day)</th>
<th>NOEL (mg/Kg/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metalaxyl</td>
<td>not set</td>
<td>not set</td>
<td>0.03</td>
<td>3</td>
</tr>
</tbody>
</table>

Exposure limits have not been set by SWA for any 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/m³ 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 from Australian ADI List, 31st March 2012

Personal Protection

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


Ventilation: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber.

Respirator: A respirator or mask is recommended when using this product. Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties:

Physical Description & colour: Cream to grey granular solid

Odour: No appreciable odour

Boiling Point: Not relevant

Freezing/Melting Point: No data.

Volatiles: Not relevant

Density: 0.784

Water Solubility: No data

pH: No data

Volatility: Not relevant

Odour Threshold: No data.

Evaporation Rate: Not relevant.

Auto ignition temp: Not relevant

Section 10 - Stability and Reactivity

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

Conditions to Avoid: Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.
Section 11 - Toxicological Information

Local Effects: There is no data to hand indicating any particular target organs.

Toxicity: For the active ingredient only: Metalaxyl:
LD50 Oral (rat) = 669 mg/kg
LD50 Dermal (rat) > 3100 mg/kg
Studies with rats and goats showed rapid metabolism and excretion via urine and faeces.

Potential Health Effects

Inhalation: Available data shows that this product may be harmful if inhaled.

Skin Contact: Available data shows that this product may cause skin irritation.

Eye Contact: This product may cause irritation to eyes

Ingestion: Harmful if swallowed

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.

Section 12 - Ecological Information

Environmental Data:
Metalaxyl has a half-life of 1 to 8 weeks in soil. The major breakdown product is from the hydrolysis of the methyl ester. Although it readily leaches in sandy soil, increased organic matter decreases leaching.

Ecotoxicology:
Metalaxyl:
Practically non-toxic to birds and freshwater fish.
Non-toxic to bees
96hr LC50 (rainbow trout, carp, bluegill) > 100mg/L, LC50 (Daphnia magna): 12.5 to 28 mg/l

Section 13 - Disposal Considerations

Disposal: Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 http://www.chemclear.com.au/ and for help with the disposal of empty drums, contact DrumMuster http://www.drummuster.com.au/ where you will find contact details for your area.

Section 14 - Transport Information

ADG: Considered exempt (AU01) from classification as Dangerous Goods by the criteria of the Australian dangerous goods Code 7 (ADG) for the transport by Road and Rail in packaging including IBCs.

IMDG/ IATA: Not Classified as Dangerous Goods according to the criteria of the International Maritime Dangerous Goods Code (IMDG) by sea and the International Air Transport Association (IATA) Dangerous Goods Regulations for the transport by air.

Section 15 - Regulatory Information

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

SUSMP: POISON scheduled S5
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 Good</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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