Section 1 - Identification of The Material and Supplier

Watheroo Minerals
Drommees Farm
Victoria Location 4376, Watheroo WA 6513
Chemical nature: Blend of bentonite and gypsum.
Trade Name: Anode Mix - B1
Product Use: Anode backfill and earthing product produced as per AS2239 and used as backfill and for applications where low electrical resistivity is required.
Further details about uses can be found on the label and in product literature.
Creation Date: December, 2012
This version issued: December, 2012 and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature
This product is classified as: Not classified as hazardous according to the criteria of SWA.
Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.
Risk Phrases: Not Hazardous - No criteria found.
SUSMP Classification: None allocated.
ADG Classification: None allocated. Not a Dangerous Good under the ADG Code.
UN Number: None allocated

GHS Signal word: NONE. Not hazardous.

PREVENTION
P232: Protect from moisture.

RESPONSE
P303: If on skin or hair: remove contaminated clothing and flush skin and hair with running water.
P304: If inhaled: remove from contaminated area. Apply artificial respiration if not breathing.
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 contents and containers to landfill.

Emergency Overview

Physical Description & Colour: Light grey coloured powdered solid (100% below 1mm).
Odour: No odour.
Major Health Hazards: no significant risk factors have been found for this product.

Potential Health Effects

Inhalation:
Short Term Exposure: Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.
Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:
Short Term Exposure: Available data indicates that this product is not harmful. It should present no hazards in normal use. In addition product is unlikely to cause any discomfort in normal use.
Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:
Short Term Exposure: This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.
Long Term Exposure: No data for health effects associated with long term eye exposure.
Ingestion:
**Short Term Exposure**: Significant oral exposure is considered to be unlikely. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

**Long Term Exposure**: No data for health effects associated with long term ingestion.

**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 3 - Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>Conc.%</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gypsum</td>
<td>13397-24-5</td>
<td>30-60</td>
<td>10 (dust)</td>
<td>not set</td>
</tr>
<tr>
<td>Calcium bentonite</td>
<td>40-70</td>
<td></td>
<td>10 (dust)</td>
<td>not set</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.

The SWA 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. The STEL (Short Term Exposure Limit) is an exposure value that may be exceeded (but should not be exceeded) for no longer than 15 minutes and should not be repeated 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.

### 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 MSDS with you when you call.

**Inhalation**: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

**Skin Contact**: Gently brush away excess particles. Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

**Eye Contact**: Quickly and gently brush particles from eyes. No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 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 product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or 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.

No fire decomposition products are expected from this product at temperatures normally achieved in a fire.

**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.

**Autoignition temperature**: Not applicable - does not burn.

**Flammability Class**: Does not burn.

### Section 6 - Accidental Release Measures

**Accidental release**: Minor spills do not normally need any special cleanup measures. In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear overalls, goggles and gloves. Suitable materials for protective clothing include cotton, rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that dusts are likely to build up in cleanup area, we recommend that you use a suitable Dust Mask. Use a P1 mask, designed for use against mechanically generated particles e.g. silica & asbestos. Otherwise, not normally necessary.
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. Consider vacuuming if appropriate. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. 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 MSDS 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: Make sure that containers of this product are kept tightly closed. Keep containers dry and away from water. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Check packaging - there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

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

<table>
<thead>
<tr>
<th>SWA Exposure Limits</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gypsum</td>
<td>10 (dust)</td>
<td>not set</td>
</tr>
<tr>
<td>Bentonite clay</td>
<td>10 (dust)</td>
<td>not set</td>
</tr>
</tbody>
</table>

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: 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 product is being used.

Skin Protection: The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when skin contact is likely.

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

Respirator: If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable Dust Mask. Otherwise, not normally necessary.

Section 9 - Physical and Chemical Properties:

- Physical Description & colour: Light grey coloured powdered solid (100% below 1mm)
- Odour: No odour.
- Boiling Point: Not available.
- Freezing/Melting Point: No specific data. Solid at normal temperatures.
- Volatiles: Moisture 8-12%
- Vapour Pressure: No data.
- Vapour Density: Not applicable.
- Specific Gravity: Maximum 2.01
- Water Solubility: Insoluble.
- pH: 7.5-8.0 (5% suspended in water)
- Volatility: No data.
- Odour Threshold: No data.
- Evaporation Rate: Not applicable.
- Coeff Oil/water Distribution: No data
- Viscosity: Not applicable.
- Autoignition temp: Not applicable - does not burn.

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
**Conditions to Avoid:** Keep containers tightly closed. Containers should be kept dry.

**Incompatibilities:** Strong acids.

**Fire Decomposition:** No significant quantities of decomposition products are expected at temperatures normally achieved in a fire.

**Polymerisation:** This product will not undergo polymerisation reactions.

### Section 11 - Toxicological Information

**Local Effects:**

**Target Organs:**

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

**Classification of Hazardous Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Risk Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.</td>
<td></td>
</tr>
</tbody>
</table>

### Section 12 - Ecological Information

This product is unlikely to adversely affect the environment. Salts, acids and bases are typically diluted and neutralised when released to the environment in small quantities. Expected to not be an environmental hazard.

### Section 13 - Disposal Considerations

**Disposal:** This product may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to separate the contamination in some way. Only if neither of these options is suitable, consider landfill.

### Section 14 - Transport Information

**ADG Code:** This product is not classified as a Dangerous Good. 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 MSDS contains only safety-related information. For other data see product literature.

**Acronyms:**

- **ADG Code:** Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
- **AICS:** Australian Inventory of Chemical Substances
- **SWA:** Safe Work Australia, formerly ASCC and NOHSC
- **CAS number:** Chemical Abstracts Service Registry Number
- **IARC:** International Agency for Research on Cancer
- **NTP:** National Toxicology Program (USA)
- **SUSMP:** Standard for the Uniform Scheduling of Medicines & Poisons
- **UN Number:** United Nations Number

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This MSDS summarises our best knowledge of the health and safety hazard statement: Information of the product and how to safely handle and use the product in the workplace. Each user must review this MSDS 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.

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Please read all labels carefully before using product.

This MSDS 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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