Material Safety Data Sheet (MSDS)

Product: Calcium Carbonate (Limestone, Ground)

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Calcium Carbonate (Limestone Ground) other terms for Limestone are Calcite or Marble

Trade Names: Omyacarb®, Marble Chips (0,00,000), White Pool Dust

Product Uses:
- Paints, Coatings, adhesives, grouts
- Textured coatings, Terazzo
- Jointing cement filler, drilling muds, textured coatings, PVC tiles

Limestone
- Microfine, Y Grade, T Grade, DD, DD12, DD135, PF, Abgrit, Selgrit, F70, Superfine, Agricultural Grade, Omyacal 50®, Omyacal® 70, Omyacal® 12, Road Base, 6mm, Moonglow® Topping (10mm), Limestone 60/16

Stonedust
- Coalmine stone-dusting

Other Names: Natural Calcium Carbonate, Calcite, Limestone, Whiting, Marble, Chips

Supplier Name: Omya Australia Pty Ltd (ACN 001 682 533)

Address: Suite 202, 280 Pacific Highway, LINDFIELD NSW 2070.

Telephone Number: +61 2 9416 6077

Facsimile Number: +61 2 9416 8008

Emergency Number: 0419 498 007 (from within Australia)

+61 419 498 007 (from outside of Australia)

Emergency contact service provided by Omya - Australia
(Operates Monday to Friday, 8:00am to 5:00pm Australian EST)

2. HAZARDS IDENTIFICATION

Hazard Classification: Non Hazardous Substance according to the Criteria of NOHSC.
Non Dangerous Good according to the Australian Dangerous Goods Code.

Risk Phrase(s): None

Safety Phrase(s): None

General Notes: Limestone powder particles may cause irritation to the skin and eyes. Prolonged and repeated exposure may cause irritation to the respiratory system. Dust exposure standards apply.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone (CaCO₃)</td>
<td>1317-65-3</td>
<td>&gt;99%</td>
<td></td>
</tr>
</tbody>
</table>

Natural, Limestone Ground - Calcium Carbonate. Also referred to as Calcite or Marble.

Naturally occurring sedimentary rock. Limestone (Ground): CAS-No. 1317-65-3

Ground with non-hazardous auxiliary agents

Silica, quartz (CAS No 14808-60-7) naturally-occurring impurity of Limestone in trace amounts. Magnesium Carbonate (CAS No 13717-00-5) is also naturally present.
Material Safety Data Sheet (MSDS)

Product: Calcium Carbonate (Limestone Ground)

4. FIRST AID MEASURES

EYE CONTACT: Rinse with plenty of clean water.
In case of continued irritation, seek medical advice.

SKIN CONTACT: Wash with water.

INHALATION: Move person to fresh air.
In case of indisposition, seek medical advice.

In case of indisposition, seek medical advice.

5. FIRE FIGHTING MEASURES

FLAMMABILITY: Non-flammable, non-combustible substance.

SPECIAL RISKS: Can release CO₂ or CO in extreme temperature conditions i.e. > 825 °C.

EXTINGUISHING AGENTS: All common extinguishing media compatible.

HAZCHEM CODE: Not regulated.

6. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS: Will not dissolve in water. Do not flush down drains or into water ways.
Slippery when wet – cordon off for road and pedestrian traffic. Avoid contact with acids.

CONTAINMENT AND CLEAN UP:
In case of spillage, avoid generating dust, wear respiratory protection when visibly dusty or for prolonged exposure, and sweep or vacuum. Very fine products should be collected in bag/containers, label appropriately.
May be lightly wetted down to minimise dust.
Cover or lightly wet down to minimize dust generation if spills cannot be dealt with immediately.

7. HANDLING AND STORAGE

HANDLING: Avoid generating airborne dust during handling and storage.
Avoid prolonged contact with skin.
Avoid heavy or prolonged dust inhalation (See TWA Section 8).
Engineering dust controls should be used ahead of, or in combination with the wearing of appropriate respiratory protection.

STORAGE: Store in original packaging, under dry conditions.
Do not store with acids.
Keep fine products stored in closed containers. Avoid the generation of airborne dust.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

HAND PROTECTION: Wear gloves to prevent irritation and drying out skin.

EYE PROTECTION: Wear goggles if visible dust in air or if irritation occurs.
Do not wear contact lenses when handling this product, as particles may get trapped underneath and cause irritation.

SKIN PROTECTION: Clothing fully covering skin, full length pants, long sleeved overalls, with close fittings at openings. Footwear to avoid dust penetration.

Issued by: Omya Australia AU-MSDS-01 Issue No: 18 * Date of Issue: 16/02/2012 Page: 2 of 4

*Replaces: AU-MSDS-01 Issue 17

While the information contained herein is correct to the best of our knowledge Omya Australia Pty Ltd herein disclaims any warranties as to the accuracy of the same. Recommendations or suggestions are made without guarantee or representation as to the result, as the conditions of use are beyond our control. All material are sold subject to Omya Australia Pty Ltd standard terms and conditions of sale and the condition that buyer shall make his own tests to determine the suitability of such product for the buyer’s purposes. No statement contained herein shall be construed as a recommendation to infringe any patent. If this MSDS is more than 2 years old, please enquire if any revisions have been made prior to its use. This Material Safety Data Sheet was prepared from information provided by Omya Australia, with approval from Omya Australia Pty Ltd.
RESPIRATORY PROTECTION

Maintain air concentrations below the occupational exposure standards, using engineering controls if necessary.

Where this is not possible, wear an approved P1 dust mask where concentration is less than 10 times permissable exposure limit.

ASCC* TWA for CaCO₃ Inhalable Dust in Australia is: 3 mg/m³
ACGIH** TLV for CaCO₃ Respirable Dust in Australia is: 10 mg/m³
ASCC TWA for Respirable Quartz in Australia is: 0.1 mg/m³

*Australian Safety and Compensation Council
** American Conference of Governmental Industrial Hygienists

ENVIRONMENTAL EXPOSURE CONTROLS

All ventilation systems should be filtered before discharge to atmosphere.

9. PHYSICAL AND CHEMICAL PROPERTIES

GENERAL INFORMATION

Appearance: powder
Colour: white
Odour: odourless
pH Value: 8.5 - 9.5 (100 g/l / 20 °C) DIN-ISO 787/9
Melting Point: 1340 °C (102 bar)
Boiling Point: not applicable
Flash Point: not applicable
Evaporation Rate: not applicable
Flammability: non-flammable
Upper/Lower Explosive Limits: not applicable
Explosive Properties: not explosive
Vapour Pressure: negligible
Vapour Density: not applicable
Relative Density: 2.7 (20 °C) DIN-ISO 787/10
Solubility
A) Water Solubility: 0.014 g/l (20 °C) 0.018 g/l (75 °C) DIN-ISO 787/8
B) Fat Solubility: Data not available
Partition Coefficient N-Octanol/H₂O: < 1 (estimation)
Auto-Ignition Temp: no self-ignition
Decomposition Temp: > 825 °C
Viscosity: not applicable

10. STABILITY AND REACTIVITY

REACTION Effervesces vigorously on contact with some acids.
CHEMICAL STABILITY stable
POSSIBILITY OF HAZARDOUS REACTIONS None known
CONDITIONS TO AVOID Heating above 825 °C
INCOMPATIBLE MATERIALS Avoid contact with acids
HAZARDOUS DECOMPOSITION PRODUCTS Can react with acids under the formation of carbon dioxide (CO₂) that can displace oxygen (danger of suffocation).
FURTHER INFORMATION none

While the information contained herein is correct to the best of our knowledge Omya Australia Pty Ltd herein disclaims any warranties as to the accuracy of the same. Recommendations or suggestions are made without guarantee or representation as to the result, as the conditions of use are beyond our control. All material are sold subject to Omya Australia Pty Ltd standard terms and conditions of sale and the condition that buyer shall make his own tests to determine the suitability of such product for the buyer’s purposes. No statement contained herein shall be construed as a recommendation to infringe any patent. If this MSDS is more than 2 years old, please enquire if any revisions have been made prior to its use. This Material Safety Data Sheet was prepared from information provided by Omya Australia, with approval from Omya Australia Pty Ltd.
# Material Safety Data Sheet (MSDS)

## Product: Calcium Carbonate (Limestone Ground)

### 11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Oral Toxicity</td>
<td>LD$_{50}$ oral, rat = &gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>Data not available</td>
</tr>
<tr>
<td>Serious Eye</td>
<td>Data not available</td>
</tr>
<tr>
<td>Damage/Irritation</td>
<td>Inhalation of dust may cause discomfort in the upper respiratory tract.</td>
</tr>
<tr>
<td>Respiratory or skin irritation</td>
<td>Prolonged and repeated inhalation of excessive dust may permanently affect the respiratory system.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Data not available</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Data not available</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Data not available</td>
</tr>
<tr>
<td>STOT – single exposure</td>
<td>Data not available</td>
</tr>
<tr>
<td>STOT – repeated exposure</td>
<td>Data not available</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Data not available</td>
</tr>
</tbody>
</table>

### 12. ECOLOGICAL INFORMATION

In its solid state, calcium carbonate is a natural mineral of the earth. In its dissolved state, the substance is a natural and indispensable component of natural waters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity</td>
<td></td>
</tr>
<tr>
<td>LC$_{50}$ Fish 96 h</td>
<td>&gt; 10'000 mg/l</td>
</tr>
<tr>
<td>LC$_{50}$ Daphnia 49 h</td>
<td>&gt; 1000 mg/l</td>
</tr>
<tr>
<td>LC$_{50}$ Algae 72 h</td>
<td>&gt; 200 mg/l</td>
</tr>
<tr>
<td>Persistence &amp; degradability</td>
<td>Not readily degradable, except in acid conditions where it tends to have a neutralizing effect.</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Calcium carbonate is a naturally occurring inorganic compound which has constituent elements that make up natural components of biological organisms.</td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>Calcium carbonate is practically insoluble except in acid conditions, and so presents a low soil mobility in most ground. Moreover it is commonly used as an effective soil conditioner and fertiliser.</td>
</tr>
</tbody>
</table>

### 13. DISPOSAL CONSIDERATIONS

Dispose of in appropriately licensed general landfill site in accordance with local, state and federal regulations. Waste should be bagged and labelled. Special arrangements made to bury bulk waste upon dumping, limiting dust generation.

### 14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
<td>None allocated</td>
</tr>
<tr>
<td>Proper shipping name</td>
<td>None allocated</td>
</tr>
<tr>
<td>GGVSee/IMDG CODE</td>
<td>None allocated</td>
</tr>
<tr>
<td>GGV/ADR</td>
<td>None allocated</td>
</tr>
<tr>
<td>RID/ADR</td>
<td>None allocated</td>
</tr>
<tr>
<td>ICAO/IATA-DGR</td>
<td>None allocated</td>
</tr>
<tr>
<td>ADNR</td>
<td>None allocated</td>
</tr>
<tr>
<td>ICAO/IATA-DGR</td>
<td>None allocated</td>
</tr>
</tbody>
</table>

### 15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poisons Schedule</td>
<td>Not a scheduled poison (Standard for the Uniform Scheduling of Drugs and Poisons No.22)</td>
</tr>
<tr>
<td>R-phrases</td>
<td>none</td>
</tr>
<tr>
<td>S-phrases</td>
<td>none</td>
</tr>
</tbody>
</table>

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe/EU</td>
<td>EINECS listed under No. 215-279-6</td>
</tr>
<tr>
<td>USA</td>
<td>TSCA Inventory listed under CAS No. 1317-65-3</td>
</tr>
<tr>
<td>Canada</td>
<td>Limestone is exempt from the PDSL (naturally occurring substance).</td>
</tr>
<tr>
<td>Australia</td>
<td>NICNAS AICS under CAS-No. 1317-65-3</td>
</tr>
<tr>
<td>Japan</td>
<td>MITI registered under 1-122-122</td>
</tr>
<tr>
<td>People’s Rep. of China</td>
<td>CAS - 1317-65-3</td>
</tr>
<tr>
<td>South Korea</td>
<td>CAS - 1317-65-3</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Exempt under HSNO</td>
</tr>
</tbody>
</table>

Issued by: Omya Australia    AU-MSDS-01 Issue No: 18  Date of Issue: 16/02/2012  Page: 4 of 4

While the information contained herein is correct to the best of our knowledge Omya Australia Pty Ltd herein disclaims any warranties as to the accuracy of the same. Recommendations or suggestions are made without guarantee or representation as to the result, as the conditions of use are beyond our control. All material are sold subject to Omya Australia Pty Ltd standard terms and conditions of sale and the condition that buyer shall make his own tests to determine the suitability of such product for the buyer’s purposes. No statement contained herein shall be construed as a recommendation to infringe any patent. If this MSDS is more than 2 years old, please enquire if any revisions have been made prior to its use. This Material Safety Data Sheet was prepared from information provided by Omya Australia, with approval from Omya Australia Pty Ltd.

*Replaces: AU-MSDS-01 Issue 17