MATERIAL SAFETY DATA SHEET

GMA GARNET

SECTION 1 – IDENTIFICATION

Product Name: GMA Garnet
Other Names: almandine garnet, PremiumBlast, SpeedBlast, NewSteel, 30/60 mesh, 50 mesh, 60 mesh, 80 mesh, 120 mesh, 600/250
Recommended Use: blast cleaning abrasive, water jet cutting abrasive, water filtration media
Supplier: GMA Garnet Pty Ltd
Address: 122 Goulds Rd
Geraldton, Western Australia
6532
Telephone Number: +61 8 9923 6000
Fax Number: +61 8 9923 3747
E-mail: sales@gmagarnet.com.au
Emergency Number: +61 8 9923 6000
24 hours 0428 218 356

SECTION 2 – HAZARDS IDENTIFICATION

NON-HAZARDOUS AND NON-DANGEROUS GOODS according to criteria NOHSC:1008(2004)

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

This material is a natural mixture of almandine garnet and other trace minerals.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Proportion (weight %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almandine Garnet</td>
<td>1302-62-1</td>
<td>Greater than 97%</td>
</tr>
<tr>
<td>Ilmenite FeTiO₃</td>
<td>103170-28-1</td>
<td>Less than 2.0%</td>
</tr>
<tr>
<td>Calcium Carbonate CaCO₃</td>
<td>471-34-1</td>
<td>Less than 1.5%</td>
</tr>
<tr>
<td>Zircon ZrSiO₄</td>
<td>149040-68-2</td>
<td>Less than 0.2%</td>
</tr>
<tr>
<td>Free Quartz SiO₂ (Crystalline Silica)</td>
<td>14808-60-7</td>
<td>Less than 0.5%</td>
</tr>
</tbody>
</table>
SECTION 4 – FIRST AID MEASURES

No acute or chronic health effects known in workers arising from short or long term exposure to this substance. Use as a blast cleaning media may create conditions of exposure to nuisance dust.

Swallowed: Non toxic. There are no known health effects resulting from accidental ingestion of small amounts that may occur during normal handling. Ingestion of larger amounts may cause irritation due to abrasiveness. Seek medical attention if symptoms develop.

Eye: Particle and dust exposure may cause eye irritation due to abrasiveness. Flush with plenty of clean water for at least 15 minutes or until particles are removed. Seek medical attention if irritation or soreness persists.

Skin: There are no known health effects from skin contact that may occur during normal handling. Seek medical attention if symptoms develop. Contact with material under pressure will damage skin by abrasion. Clean and dress any open wounds and seek medical attention.

Inhaled: Exposure to nuisance dust created by use as a blast cleaning media may cause throat and lung irritation, coughing or shortness of breath. Move to fresh air and blow nose to remove particulates from nasal passages. Seek medical attention if symptoms persist.

It is recommended that eyewash facilities are available in the workplace.

SECTION 5 – FIRE FIGHTING MEASURES

Flammability: Non-flammable.
Flashpoint: Non-explosive.
General Hazard: This product is non-flammable and does not support combustion.
Extinguishing Media: Use media suitable for the material that is burning.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Wear safety equipment as for normal handling. If possible, vacuum the material to avoid generating unnecessary dust, otherwise, sweep any spillages.

SECTION 7 – HANDLING AND STORAGE

No special precautions necessary. Storage areas should be ventilated and dust generation minimized when handling. Use good housekeeping practices to keep dust to a minimum.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: Nuisance dust levels should be kept below 10 mg/m³. If this level is exceeded then respiratory protection is required.
Engineering Controls: Maintain ventilation and/or dust collection to reduce exposure to nuisance dust generated during handling and use. Maintain a clean and safe work environment and monitor effectiveness.

Personal Protection: Follow local, state or federal guidelines for the use of personal protection equipment. Blast cleaning operations should use an air fed abrasive blast hood conforming with Australian Standards 1715 and 1716, such as a Nova 2000, as well as leather (or equivalent) gloves and apron when in use. Hearing protection should also be worn when blast cleaning.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pink to red coloured free flowing sand.
Odour: Odourless.
\( \text{pH} \): Neutral
\( \text{Vapour Pressure} \): Not applicable.
\( \text{Boiling Point} \): Not applicable.
\( \text{Melting Point} \): Approximately 1250°C
\( \text{Radioactivity} \): Not detectable above background levels.
\( \text{Solubility in Water} \): Insoluble.
\( \text{Specific Gravity} \): 4.1
\( \text{Flammability} \): Non-flammable.
\( \text{Hardness} \): 7.5 – 8.0 Mohs
\( \text{Bulk Density} \): Approximately 2.3 t/m\(^3\)
\( \text{Particle Size} \): Average range between 0.1 – 0.6mm, depending on grade.

SECTION 10 – STABILITY AND REACTIVITY

\( \text{Chemical Stability} \): Stable and inert material under normal and anticipated storage, handling and use conditions.
\( \text{Conditions to Avoid} \): None known.
\( \text{Incompatible Materials} \): None known.
\( \text{Decomposition} \): Not applicable.
\( \text{Hazardous Reactions} \): None known.

SECTION 11 – TOXICOLOGICAL INFORMATION

This material is non-toxic with no known acute or chronic health effects relating to human exposure. Refer section 4 – First Aid Measures.

SECTION 12 – ECOLOGICAL INFORMATION

This material is a naturally occurring mineral with no known ecotoxicity. It is insoluble in water and unlikely to contaminate waterways or food chains.
SECTION 13 – DISPOSAL CONSIDERATIONS

Follow local, state or federal guidelines for disposal of inert solid waste, eg for landfill.

MATERIAL CONTAMINATED IN USE MAY NEED SPECIAL HANDLING AND DISPOSAL. IT IS THE RESPONSIBILITY OF THE USER TO UNDERTAKE ANY EVALUATION CLASSIFICATION AND DISPOSAL OF MATERIAL AFTER USE.

SECTION 14 – TRANSPORT INFORMATION

No special precautions necessary. It is recommended to keep bags closed and dry bulk loads covered to prevent dust generation.

SECTION 15 – REGULATORY INFORMATION

Non-hazardous and non-dangerous goods. No known additional regulations for this product.

SECTION 16 – OTHER INFORMATION

This MSDS has been prepared by GMA Garnet Pty Ltd in accordance with the National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)].

Date of Issue: December 2007
Revision 1

As per Worksafe Guidance Note NOHSC 3017, each user should review the information in the specific context of the intended application.

End of MSDS.