



RIZHAO GARNET LTD

The new global leader in garnet abrasives

GHS compliant SDS

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

RZG Garnet

SECTION 1 – IDENTIFICATION

Product Name : RZG Garnet Tel Number : +86 633 3711881
Other Names : Garnet sand , Med Emergency : +86 633 3711880
Almandine Garnet Fax Number : +86 633 3711882
Product Grade/Type : 20/40, 30/60 mesh,
80mesh, 120mesh, 180mesh, 220mesh
Recommended Use : blast cleaning abrasive, water jet cutting abrasive, water filtration media
Manufacturer : Rizhao Garnet LTD
Address : No. 57, Bihai Road, Rizhao, China.
E-mail : sales@chinagarnet.com

SECTION 2 – HAZARDS IDENTIFICATION

Main hazard : May cause irritation to skin and eyes
Flammability : Not Flammable
Chemical hazard : None
Biological hazard : Not known.
Reproduction hazard : Not known.
Eye Effects : May cause irritation
Health Effects – skin : May cause irritation particularly in very sensitive individuals
Health Effects – ingestion : May release some heavy metals in stomach acid.
Health Effects – inhalation : Inhalation of dust may cause coughing and sneezing. This product
may aggravate respiratory disorders.
Carcinogenicity : Not known.
Mutagenicity : Not known.
Neurotoxicity : Not known.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

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

| Chemical Name | CAS Number | Proportion (weight %) |
|---|----------------|-----------------------|
| Almandine Garnet $\text{Fe}_3\text{Al}_2(\text{SiO}_4)_3$ | 1302-62-1 | Greater than 85% |
| Omphacite $(\text{Ca},\text{Na})(\text{Mg},\text{Fe},\text{Al})\text{Si}_2\text{O}_6$ | None allocated | Less than 13% |
| Ilmenite FeTiO_3 | 103170-28-1 | Less than 0.5% |
| Olivine $(\text{Mg}, \text{Fe})_2\text{SiO}_4$ | 1317-71-1 | Less than 0.5% |
| Rutile TiO_3 | 13463-67-7 | Less than 0.5% |
| Quartz SiO_2 (Crystalline Silica) | 14808-60-7 | Less than 0.5% |

SECTION 4 - FIRST AID MEASURES

Product in 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.

Product on 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.

Product Ingested : 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.

Product Inhaled : Exposure to 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.

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

No special precautions necessary. 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 minimised when handling loose bulk product. Use good housekeeping practices to keep dust to a minimum.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

| | |
|-----------------------------------|---|
| Exposure Standards | : Crystalline silica (quartz) respirable dust: 0.1 mg/m ³ TWA (time weighted average) may be exceeded when the product is used for dry blast cleaning (respirable dust is < 7 microns particle equivalent aerodynamic diameter) Total dust (inspirable): 10 mg/m ³ TWA |
| Engineering Controls | : Maintain ventilation and/or dust collection to reduce exposure to dust generated during handling, use and clean-up. Maintain a clean and safe work environment and monitor effectiveness. |
| Personal Protection – Respiratory | : If exposure limit exceeded, a full-face piece respirator must be worn. |
| Personal Protection – Hand | : See below – skin. |
| Personal Protection – Eye | : Use chemical safety goggles and/or full-face shield, when dusting is possible. Maintain eye wash fountain and quick drench facilities in work area. |
| Personal Protection – Skin | : Impervious clothing should be worn, including boots, gloves, lab coat, apron, or overalls, as appropriate to avoid skin contact. |

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------|---|
| Appearance | : Red coloured free flowing sand. |
| Odour | : Odourless. |
| PH | : Neutral |
| Vapour Pressure | : Not applicable. |
| Boiling Point | : Not applicable. |
| Melting Point | : Approximately 1250°C |
| Radioactivity | : Not detectable above background levels. |
| Solubility in Water | : Insoluble. |
| Specific Gravity | : 4.0 |
| Flammability | : Non-flammable. |

Hardness : 7.5-8.0 Mohs
Bulk Density : Approximately 2.2 t/m³
Particle Size : Average range between 0.1 - 1.0mm, depending on grade.

SECTION 10 - STABILITY AND REACTIVITY

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

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity : No data available
Skin and Eye Contact : No data available
Carcinogenicity : Not expected to be carcinogenic – crystalline silica not present.
Mutagenicity : No data available
Reproductive Hazards : No data available

SECTION 12 – ECOLOGICAL INFORMATION

Aquatic Toxicity – Fish : No information reported.
Aquatic Toxicity – Daphnia : No information reported.
Aquatic Toxicity – Algae : No information reported.
Biodegradability : Not biodegradable
Bioaccumulation : No information reported.
Mobility : Classified as non-hazardous.
Environmental – Air : Dust may be a nuisance factor
Environmental Fate – Soil : Very low leachability in acid soils.
Environmental Fate – Water: No hazardous species leach into water and, therefore, the product is not expected to be hazardous to aquatic organisms

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Methods : The product is classified as non-hazardous
Disposal of Packaging : Empty packaging may be disposed to a permitted general waste landfill.
UN Number : Not regulated
IMDG – Class : Not regulated
SABS 0228 : Not regulated
Tremcard Number :

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

UN Number : NA
Substance Identity Number : NA
IMDG – Class : NA
IMDG Packaging Group : Solid non-corrosive
IMDG – Marine Pollutant : Not classified as Marine Pollutant
Indication of Danger : Irritant
Risk Phrases : Harmful if swallowed
Safety Phrases : Keep out of reach of children
Avoid contact with skin and eyes

SECTION 16 – OTHER INFORMATION

Other Special Considerations : None identified
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Notice to Reader :

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