Material Safety Data Sheet

(Complies with 29 CFR 1910.1200)

SECTION I

IDENTITY (as used on labels and lists)

Beach Mineral Garnet Abrasives Grains and Filtration Sand

SECTION II - Hazardous Ingredients / Identify information

Specific chemical identity

Beach Mineral Garnet is a natural mixture of Almandite garnet with the chemical composition of Fe_3Al_2 Mg $(SiO_4)_3$ and other trace minerals as per CAS No for Almandite garnet 1302-62-1.

Mineralogical Content - *Typical*

Almandite garnet	97 – 98 %
Ilmenite	Less than 2.0%
Quartz (free silica)	Less than 1.0%*
Others	Less than 0.5%

* <0.5% quartz guaranteed

SECTION III - Physical and Chemical Characteristics

Chemical Composition - *Typical*

SiO_2	36%
Fe_2O_3	33%
Al_2O_3	23%
MgO	6%
MnO	1%
CaO	1%
TiO_2	< 1%
Sol.Cl	< 25 ppm

Physical Characteristics - *Typical*

Specific Gravity	4.1
Mohs Hardness	7.5+
Acid Solubility (HCL)	<1.0%
Bulk density	145 lb/ft3
Colour	Red-pink
Grain shape	Sub angular
Toxic substances	none
Conductivity	<125 M/cm

SECTION IV - HAZARDS IDENTIFICATION

Eye : Solid or dust is moderate eye irritant due to its abrasive action.

Inhalation : May be regarded as nuisance dust but can be irritating if inhaled at high concentrations and may cause symptoms such as coughing and sneezing. The TLV (TWA) for occupational exposure nominate 10 mg/ m^3 as total dust and 5 mg/m^3 as a respirable dust.

Skin : Non hazardous.

Ingestion : There are no known hazards caused by accidental ingestion of small amount such as might occur during normal handling. Ingestion of larger quantities might cause irritation of the gastro-intestinal system as a result of abrasive action.

SECTION V - FIRST AID MEASURES

Eye : Hold eye as open and rinse continuously with a gentle stream of clean running water for at least 15 minutes. Seek medical attention if any irritation or soreness of eye persist.

Inhalation : Remove from source of exposure into fresh air and seek medical attention if any symptoms persist.

Skin : No specific first aid is required for skin contact. Remove clothing &wash skin with soap and /or water. Seek medical attention if any irritation or soreness of the skin develops.

Ingestion : First aid is unlikely to be required but if necessary rinse mouth with water ensuring that mouth wash is not swallowed and seek medical attention as a precautionary measure if large amounts have been ingested.

SECTION VI - FIRE FIGHTING MEASURES

This is a non-combustible material. Use whatever protective equipment and extinguishing agent are suitable for the primary cause of fire.

SECTION VII - ACCIDENTAL RELEASE MEASURES

Wear safety equipment for normal handling, avoid generating dust, sweep or vacuum up, recycle/ reuse or dispose to landfill subject to local regulations. Transport is not regulated and no specific storage requirements.

SECTION VIII - HANDLING AND STORAGE

Storage : Transport is not regulated and there is no specific storage requirement but storage should be designed to minimise creation of the dust.

Spillage : Wear protective equipment as specified for handling. Sweep or vacuum up and reuse or dispose. Avoid generation of dust.

Waste disposal : Disposal to land fill such a way as to prevent generation of dust and subjected to local regulations.

Fire explosion : Incombustible

Fire extinguishing : Use whatever protective equipments and extinguishing agent that are suitable for primary cause of fire.

SECTION IX - EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation : Ventilation requirement will depend upon handling methods and amount in use but extraction or make up air may be required to minimise dust layers/levels below exposure limits.

Protective equipments : Safety goggles or glasses. A dust type respirator may be required to prevent ingestion.

TLV (TWA) : 10 mg/m^3 as total dust.
TLV (TWA) : 5 mg/m^3 as total dust.

SECTION X - STABILITY AND REACTIVITY

Chemical stability : Stable
Reactivity : Inert
Incompatibilities : None in normal or expected use.
Decomposition : Decomposition will not occur

SECTION XI - TOXICOLOGICAL INFORMATION

Non Toxic

SECTION XII - ECOLOGICAL INFORMATION

The matter is unlikely to cause any environmental damage if handled, used and disposed off in the approved manner. It is insoluble in water and unlikely to contaminate waterways or enter the food chains.

SECTION XIII – DISPOSAL CONSIDERATIONS

This is a Non hazardous material, disposal must be in accordance with federal state and local regulations. Consult and comply with current regulations. If approved, may be transferred to an approved landfill site.

SECTION XIV – TRANSPORT INFORMATION

Transport is not regulated & may be transported as a non-hazardous material. Trucks transporting/carrying bulk material should be covered to prevent dust generation.

IATA - Not regulated as restricted item
ICAO – Not regulated as restricted item

SECTION XV – REGULATORY INFORMATION

Labelling : May be required in the USA if quartz exceeds 0.10 %.

Radiological protection **:** The regulations pertaining to radiological protection vary from country to country. It is the responsibility of the buyer to ensure that those are met in accordance with his/her country law.