



## MATERIAL SAFETY DATA SHEET

### Garnet Sand

**Product Name:** Garnet Sand

**Other Names:** Garnet Abrasive, Almandine Garnet, Waterjet Garnet

**CAS Number:** 1302-62-1

**Chemical Composition:** Mainly Almandine ( $\text{Fe}_3\text{Al}_2(\text{SiO}_4)_3$ )

**Supplier:** Basekim Company

### 1. Hazard Identification

Garnet Sand is generally **not classified as hazardous** under normal conditions of use.

#### Important Hazards:

- Dust may cause eye and respiratory irritation.
- Avoid breathing excessive dust.
- Spilled material may create slipping hazards.
- Use adequate ventilation during abrasive blasting.

**Signal Word:** Not required

### 2. Composition

| Component                  | Typical Content |
|----------------------------|-----------------|
| Almandine Garnet           | >95%            |
| Natural Mineral Impurities | Balance         |

### 3. First-Aid Measures

**Inhalation:** Move to fresh air. Seek medical attention if irritation persists.

**Eye Contact:** Flush eyes with clean water for at least 15 minutes.

**Skin Contact:** Wash with soap and water.

**Ingestion:** Rinse mouth with water. Seek medical advice if discomfort occurs.



#### 4. Firefighting Measures

- Non-flammable.
- Use extinguishing media suitable for the surrounding fire.
- No hazardous combustion products are expected from the mineral itself.

#### 5. Accidental Release

- Sweep or vacuum spilled material.
- Avoid generating dust.
- Wear suitable eye and respiratory protection when cleaning large spills.
- Prevent unnecessary release into drains.

#### 6. Handling and Storage

- Avoid breathing dust.
- Handle in well-ventilated areas.
- Store in a dry place.
- Protect from moisture and contamination.
- Keep bags tightly closed when not in use.

#### 7. Personal Protection

**Eyes:** Safety goggles.

**Hands:** Protective gloves.

**Respiratory:** Dust mask or particulate respirator where dust is generated.

**Body:** Suitable work clothing and safety footwear.

#### 8. Physical and Chemical Properties

| Property      | Typical Information                |
|---------------|------------------------------------|
| Appearance    | Dark red to brown granular mineral |
| Odour         | Odourless                          |
| Hardness      | 7.5–8.5 Mohs                       |
| Density       | 3.9–4.2 g/cm <sup>3</sup>          |
| Melting Point | Approximately 1315°C               |
| Solubility    | Insoluble in water                 |



| Property     | Typical Information |
|--------------|---------------------|
| Flammability | Non-flammable       |

## 9. Stability and Reactivity

Stable under normal storage and handling conditions.

Avoid contamination with strong acids or incompatible chemicals.

No hazardous polymerization occurs.

## 10. Toxicological Information

Low toxicity under normal industrial use.

Dust may cause temporary:

- Eye irritation
- Nose and throat irritation
- Respiratory discomfort

## 11. Environmental Information

Naturally occurring mineral.

Not expected to be hazardous to the environment.

Avoid unnecessary discharge of large quantities into waterways.

## 12. Disposal

Reuse or recycle where practical.

Dispose of waste according to local regulations.

## 13. Transport Information

Not classified as dangerous goods for road, sea or air transport.



#### 14. Important Notice

This MSDS is a general guide for Garnet Sand. Product characteristics may vary depending on mesh size and application (blasting, waterjet cutting or filtration). Refer to the current Certificate of Analysis (COA) for batch-specific specifications.