

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY

**SUBSTANCE NAME:** Garnet  
**DESCRIPTION:** 30-60 Grit Garnet Abrasive  
**USE OF THE SUBSTANCE:** Mineral blasting abrasive for industrial use  
**MODEL NO.** GP22  
**PART NO:** 3052090  
**COMPANY IDENTIFICATION:** CLARKE INTERNATIONAL,  
HEMNALL STREET, EPPING, ESSEX. CM16 4LG  
**BUSINESS TELEPHONE:** 01992 565300  
**BUSINESS FAX:** 01992 561562  
**EMERGENCY TELEPHONE:** 020 89887400

## 2. COMPOSITION/INFORMATION ON INGREDIENTS:

Chemical Data Of The Product	EINECS	CAS NO.	Other ingredients (average values)
Silicon dioxide (SiO <sub>2</sub> ) (not silicogenic)	238-878-4	14808-60-7	35%
Iron oxide (Fe <sub>2</sub> O <sub>3</sub> )	215-168-2	1309-37-1	33%
Aluminium oxide (Al <sub>2</sub> O <sub>3</sub> )	215-691-6	1344-28-1	23%
Magnesium oxide (MgO)	215-171-9	1309-48-4	7%
Calcium oxide (CaO)	215-138-9	1305-78-8	1%
Manganese oxide (MnO)	215-266-5	1317-35-7	1%

### Hazardous ingredients

Contains no hazardous ingredients.

### Substances with specified EC threshold values

Contains no substances with specified EC threshold values.

## 3. HAZARDS IDENTIFICATION:

### Hazards identification

Not subject to labelling requirements in terms of the Dangerous Preparations Directive 1999/45/EC. However, adhere to the information in this safety data sheet.

No silicosis hazard derives from its use.

### Special hazard notices for humans and the environment

Potential dust load in case of respirable dust.

## 4. FIRST AID MEASURES:

### FIRST AID:

#### General information

Seek medical advice at the occurrence of a health disorder.

#### After inhalation

Ensure supply of fresh air. Consult a doctor in case of irritation of the respiratory tracts.

#### After skin contact

Wash with water and rinse.

#### After eye contact

Remove contact lenses, hold eyelids open and rinse generously with clean, flowing water for at least 10 minutes. Consult a doctor if necessary.

#### After ingestion

Rinse mouth and drink plenty of water. Do not induce vomiting. In case of sickness, consult a doctor.

#### Advice to medical doctor

No information available.

# SAFETY DATA SHEET

## 5. FIRE FIGHTING MEASURES:

### Suitable extinguishing media

Product does not burn. Match extinguishing measures to surroundings.

### Extinguishing media that must not be used

None known.

### Special hazards by the substance or the preparation itself, its combustion products or resulting gases

None known.

### Special protective equipment for fire-fighting

None known.

### Additional information

None known.

## 6. ACCIDENTAL RELEASE MEASURES:

### Personal precautions

Avoid dust formation. Adhere to safety measures under point 7 and 8.

### Environmental precautions

None known.

### Methods for cleaning up

Collect mechanically and dispose off according to regulations.

### Additional information

None known.

## 7. HANDLING & STORAGE:

### Advice on safe handling

Avoid dust formation.

### Advice on protection against fire and explosion

No special fire protection measures are required.

### Additional advice

None known

### Information on storage conditions

Store product in a dry place.

### Requirements for storage facilities and containers/vessels

No special requirements.

### VCI storage class

Storage class 13 (non-combustible solids).

### Specific uses

Garnet is used for the manufacture of or use as blasting or grinding abrasives.

# SAFETY DATA SHEET

## 8. EXPOSURE LIMITS & EQUIPMENT FOR PERSONAL PROTECTION:

### Workplace exposure limits and/or biological limits

#### Workplace exposure limits (WEL) for inhalable dust

Inhalable dust 10mg/m<sup>3</sup>  
Respirable dust 4mg/m<sup>3</sup>

The limits shown are for an 8 hour day (TWA).

#### Occupational exposure limits (OEL) of the European Union

Country-specific. For regulatory information in the UK please refer to [www.hse.gov.uk/coshh/basics.exposurelimits.htm](http://www.hse.gov.uk/coshh/basics.exposurelimits.htm)

#### Exposure control

Technical measures and the implementation of suitable operational processes have preference over the use of personal precautions. Since Garnet is not a hazardous substance, only the generally applicable dust threshold limit values are applied. Nevertheless, please take note of the TRGS 402 and TRGS 900.

#### Personal protective equipment

The type of personal protective equipment must be selected depending on the concentration and quantities of hazardous substances, specific to the workplace.

#### Respiratory protection

Generally no personal respiratory protection is needed.

In case of inadequate ventilation or exceeding of the workplace exposure limits a protective breathing mask must be worn (FFP, filtering face piece, filter half mask depending on the existing concentration).

#### Hand protection

Glove material: leather.

#### Eye protection

Tight-fitting safety goggles. Use (flexible mask goggles) in compliance with EN 166:2001.

#### Skin protection

No skin protection by means of half or full body protective suit and boots is required at appropriate application.

#### Industrial hygiene measures

The minimum standards for safety measures in the handling of working materials are contained in the TRGS 500. Do not eat, drink, smoke or sniff while working.

Avoid contact with skin, eyes and clothing. Remove soiled or soaked clothing immediately. Wash hands before breaks and after work.

Use appropriate skin protection products.

#### Environmental exposure controls

See section 6 and 7. No measure over and above required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

<b>Form</b>	Edged
<b>Physical state</b>	Solid
<b>Colour</b>	Red-Brown
<b>Odour</b>	Odourless

#### Important health, safety and environmental information

##### Explosive properties

The product is not explosive, however the formation of explosive dust-air mixtures are possible.

## SAFETY DATA SHEET

<b>Lower explosive limit</b>	None known
<b>Upper explosive limit</b>	None known
<b>Vapour pressure</b>	Not relevant
<b>Density</b>	approx. 3.5-4.3 g/cm <sup>3</sup>
<b>Expiry time</b>	Not relevant
<b>Solubility in water</b>	Not water-soluble
<b>pH value</b>	Not applicable
<b>Boiling point</b>	Not applicable
<b>Flashpoint</b>	Not determined, since the product is not flammable.
<b>Melting point</b>	approx. 1,300°C
<b>Ignition temperature</b>	Not determined, since the product is not flammable.

### 10. STABILITY AND REACTIVITY:

#### Conditions to avoid

In case of appropriate use, there are no known conditions to be avoided.

#### Materials to avoid

In case of appropriate use, no hazardous reactions are to be expected.

#### Hazardous decomposition products

In case of appropriate use, there are no known hazardous decomposition products.

### 11. TOXICOLOGICAL INFORMATION:

#### Toxicokinetics, metabolism and distribution

According to the BGIA (Institute for Occupational Safety and Health) Expert Opinion No. 2009/20835/9311 of 27.02.2009 mat-loe the product Garnet does not contain any silicogenic, toxic and carcinogenic components.

#### Acute toxicity, irritability and cauterisation

No information available on product.

#### Sensitivity (skin, respiratory tract)

No information available on product.

#### Toxicity at repeated intake/absorption (subacute, subchronic and chronic)

Garnet is not known for toxicity.

#### CMR effects (carcinogenic, mutagenic and reprotoxic effects)

According to BGIA Expert Opinion no carcinogenic effects have been identified.

#### Summary of assessment of CMR properties

No known CMR properties.

#### Practical experiences (classification-related and other observations)

No information available on product.

#### Other information

Aluminium oxide: LD 50 > 5000 mg\*kg<sup>-1</sup> (rats, oral)

# SAFETY DATA SHEET

## 12. ECOLOGICAL INFORMATION:

### Ecotoxicity

No ecological problems are to be expected if the product is handled and used correctly.

### Aquatic toxicity

There are no harmful effects on water organisms.

### Mobility

According to current experiences this product is not soluble in water/

### Persistence and degradability

According to current experiences this product is inert.

### Bioaccumulation potential

No data available. A concentration in organic material is rather improbable.

### Results of the verification of the PBT properties (persistent, Bioaccumulative and toxic)

The ingredients in this product do not fulfil the criteria to be classified as PBT or vPvB (Very persistent and very bioaccumulative).

### Other harmful effects

No known harmful effects.

## 13. DISPOSAL CONSIDERATIONS:

### Disposal code according to the Waste Catalogue Ordinance

120117 blasting abrasive wastes with the exception of those that fall under 120116.

### Cleaned packaging

Packaging that has been cleaned can be used again or be recycled.

## 14. TRANSPORT INFORMATION:

### Land transport ADR/RID

Not considered hazardous goods in terms of these transport regulations.

### Transport by sea IMDG code/GGVSee

Not considered hazardous goods in terms of these transport regulations.

### Air transport ICAO-TI and IATA-DGR

Not considered hazardous goods in terms of these transport regulations.

## 15. REGULATORY INFORMATION:

### Chemical safety assessment (CSA)

A chemical safety assessment for substances in this product was not performed.

### Classification/labelling according to EEC directives

None required.

### Symbol(s) and hazard designation(s) of the product

None required.

### Hazard-determining components of labelling

Does not contain any.

### R phrases

Not required.

### S phrases

22 Do not inhale dust.

26 In case of eye contact, immediately rinse thoroughly with water and consult a doctor.

# SAFETY DATA SHEET

37/39 Wear suitable protective gloves and goggles.

## Information on labelling

The product is not subject to labelling requirements.

## EU regulations

None required.

## National regulations

### Water hazard class

Not hazardous to water, classification according to VwVwS (Administrative Regulation on Substances Hazardous to Water). Attachment 4.

### Technical Instructions on Air Quality Control (TA-Luft)

Ingredients not specifically mentioned.

### Haazardous incident (reporting) ordinance (12.BimSchV)

Ingredients not specifically mentioned.

### Solvents ordinance (31.BLmSchV)

Ingredients not specifically mentioned.

### Chemicals prohibition ordinance (CPO)

Ingredients not specifically mentioned.

### Relevant technical regulations for hazardous substances

None known, since it contains no hazardous substances.

### Occupational restrictions

None known.

### Miscellaneous

Not subject to the volatile organic compounds (VOCs) directive.

### International regulations

None known.

## 16. OTHER INFORMATION:

### Supporting EU directives

None known.

### Application restrictions recommended by manufacturer

Only for industrial use.

### Other notices

The information in this safety data sheet is based on the best of our knowledge at the time of going to print. The information should provide you with guidelines on the safe handling and use of the product mentioned in this safety data sheet with regard to storage, processing, transport and disposal. The information cannot be transferred to other products. If the product mentioned in this safety data sheet is combined, mixed or processed with other materials, or subjected to a processing procedure, the information in this safety data sheet, in so far as something else does not expressly result from this, cannot be transferred to the new material produced this way.

### Amendments compared with the last version

Adjustment in compliance with REACH Regulation (EC) No. 1907/2006

**The information is based on our present knowledge. However it does not constitute a guarantee for any product properties and does not establish a legally valid contractual relationship.**