

# ALMANDINE GARNET

The substance is not classified as hazardous under the CLP Regulation (1272/2008/EC), is not persistent bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) as defined in Annex XIII of the REACH Regulation, and is not included in the ECHA candidate list of substances of very high concern. Therefore provision of a Safety Data Sheet (SDS) is not mandatory. This Substance Information Sheet (SIS) is a voluntary presentation of certain information that may assist the user in the handling of the substance.

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product Identifier  
Product Name: [Almandine Garnet](#)  
Product Description: Ferro Aluminium Silicate  
CAS: 1302-62-1  
Registration Number: Exempted in accordance with Annex V.7
- 1.2 Relevant identified uses of the substance or mixture and uses advised against  
Product use: Blasting abrasive, jet cutting abrasive
- 1.3 Details of supplier of the safety data sheet  
Scangrit, Eastfield Road, South Killingholme, Immingham, DN40 3NF, United Kingdom  
Email address of person: [info@scangrit.co.uk](mailto:info@scangrit.co.uk) (Dr Gerry Bourke is responsible for this SIS)
- 1.4 Emergency telephone number of the supplier  
Telephone number: [Phone +44 \(0\) 1469 574715](tel:+441469574715) or Fax +44 (0) 1469 571644  
Hours of Operation: Office hours

## SECTION 2: Hazards identification

- 2.1 Classification of substance or mixture  
Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)  
Classification: Not classified
- 2.2 Label Elements
- 2.2.1 Labeling according to Regulation (EC) No. 1272/2008  
None
- 2.3 Other hazards  
The substance does not meet the criteria for a PBT or a vPvB substance.  
Use of this material may generate dust.  
The level of respirable crystalline silica is less than 1 % and therefore classification is not warranted.

## SECTION 3: Composition/information on ingredients

### 3.1

Product/Ingredient Name	Identifiers	%	Classification		Type
			67/548/EEC	1272/2008 [CLP]	
Almandine	CAS: 1302-62-1	>97%	Not Classified	Not Classified	[*]
Ilmenite	EC: 235-334-8 CAS: 12168-52-4	<2%	Not Classified	Not Classified	[B]
Quartz	EC: 238-878-4 CAS: 14808-60-7	<0.5%	Not Classified	Not Classified	[B]

#### Type

[*]	Substance
[A]	Constituent
[B]	Impurity
[C]	Stabilizing additive

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

Eye contact:

Do not rub eyes. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation:

Move to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact:

Use general hygiene measure for contact with the material.

Ingestion:

Wash out mouth with water. Move to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### 4.2 Most important symptoms and effects, both acute and delayed

The product may cause temporary mechanical irritation to the eyes, nose throat and lungs. The effects may be delayed.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

Suitable extinguishing media:

Use an extinguishing agent appropriate to the surrounding materials.

Unsuitable extinguishing media:

None known

### 5.2 Special Hazards arising from the substance or mixture

Hazards from the substance/mixture: No specific hazard

### 5.3 Advice for fire-fighters

Fire fighters should wear appropriate protective clothing and self contained breathing apparatus.

## SECTION 6: Accidental release measures

- 6.1 Personal precautions  
Avoid breathing dust. Put on appropriate personal protective equipment.
- 6.2 Environmental precautions  
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- 6.3 Methods and material for containment and clean up.  
Ventilate the area thoroughly. Vacuum or sweep up material and place in suitable container for recycling or disposal.
- 6.4 References to other sections  
Section 1 for emergency contact information  
Section 8 for information on appropriate personal protective equipment.  
Section 13 for Waste disposal.

## SECTION 7: Handling and storage

- 7.1 Precautions for safe handling  
Avoid airborne dust generation. Provide appropriate exhaust ventilation at places where airborne dust is generated. In case of insufficient ventilation, wear suitable respiratory protective equipment. Handle packaged products carefully to prevent accidental bursting.
- 7.2 Conditions for safe storage including incompatibilities  
Paper packaging should be kept dry.
- 7.3 Specific end uses  
Check identified uses in section 1.2

## SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters  
Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust, respirable crystalline silica dust).

Product/component name	Exposure Limit Values
Almandine	EH40/2005 WELs (United Kingdom (UK)). TWA: 4mg/m <sup>3</sup> 8 hours. Form: Respirable dust TWA: 10mg/m <sup>3</sup> 8 hours. Form: Total dust

The OEL (Occupational Exposure Limit) for respirable quartz dust is 0.1 mg/m<sup>3</sup> in the United Kingdom, measured as an 8 hour TWA (Time Weighted Average). For the equivalent limits in other countries, please consult a competent occupational hygienist or the local regulatory authority.

- 8.2 Exposure controls  
Risk management measures aimed at the protection of human health are to be considered in cases of inhalation of powder or dusts during use. Process enclosures, local exhaust ventilation or other engineering controls should be employed to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protective equipment:                      Wear suitable protective clothing.

Hand protection:    Wear suitable gloves. Where necessary, gauntlets should be worn to protect against abrasive ricochet.

Respiratory protection:                                      Use properly fitted respiratory protection, complying with an approved standard, appropriate for the known or anticipated

exposure levels and the hazards of the product. Blasters should wear an air-fed blasting helmet complying with approved standards, to afford the correct level of respiratory and eye/face protection.

Eye/face protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to dusts. If operating conditions cause high dust concentrations wear dust goggles.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practices. Wash hands, forearms and face thoroughly before eating or smoking and at the end of the working period. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of the environmental protection legislation.

## SECTION 9: Physical and chemical properties

### 9.1 Information on the basic physical and chemical properties

Appearance	Solid, sub-angular particles. Colour: Pink – reddish brown
Odour	Odourless
Odour threshold	Not applicable
pH	Not applicable
Melting point	1250-1315°C
Initial boiling point and range	Not applicable
Flash Point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	Non-flammable
Upper/lower flammability or explosive limits	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative Density (ref water at 20°C)	4.1
Solubility	Insoluble
Partition coefficient: n-octanol/water	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	Not applicable
Explosive properties	Not applicable
Oxidising properties	Non-oxidising

### 9.2 Other information

## SECTION 10: Stability and reactivity

10.1	Reactivity:	Non reactive
10.2	Chemical stability:	Stable under normal conditions of use, storage and transport
10.3	Possibility of hazardous reactions:	No dangerous reactions known
10.4	Conditions to avoid:	Avoid creating dusty conditions and prevent wind dispersal
10.5	Incompatible materials:	Not applicable

10.6 Hazardous decomposition products: No hazardous decomposition products should be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity:	Not available
Irritation/Corrosion:	
Skin:	Not irritating/corrosive
Eyes:	Not irritating/corrosive
Sensitiser:	
Skin:	No known significant effects or critical hazards
Respiratory:	No known significant effects or critical hazards
Mutagenicity:	No known significant effects or critical hazards
Carcinogenicity:	No known significant effects or critical hazards
Reproductive Toxicity:	No known significant effects or critical hazards
STOT (single exposure):	Not available
STOT (repeated exposure):	Not available
Aspiration Hazard:	Not available

## SECTION 12: Ecological information

12.1 Toxicity	No known significant effects or critical hazards
12.2 Persistence and degradability	Not readily biodegradable
12.3 Bioaccumulative potential	Not available
12.4 Mobility in soil	Not available
12.5 Results of PBT and vPvB assessment	Not applicable
12.6 Other adverse effects	No known significant effects or critical hazards

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste should not be disposed of by release to sewers.

The material, as supplied, may be disposed under LOW code (EWC code) 01 04 09 Waste sand and clays. Once used as an abrasive the material may be disposed of under the following LOW codes as appropriate  
LOW Code 12 01 16 – Waste blasting material containing dangerous substances, or  
LOW Code 12 01 17 – Waste blasting material other than those mentioned in 12 01 16.

Waste packaged should be recycled where possible. Empty bags may contain some product residues.

## SECTION 14: Transport information

14.1	UN number	Not applicable
14.2	UN proper shipping name	Not applicable
14.3	Transport hazard classes	Not applicable
14.4	Packaging group	Not applicable
14.5	Environmental hazards	Not applicable
14.6	Special precautions for user	Not applicable
	Transport in bulk according to Annex II of MARPOL73/78 and the IBC code	Not applicable

## SECTION 15: Regulatory information

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	Not applicable
15.1.1	Chemical Safety Assessment	Not Applicable
15.2	Registration status	Not applicable

## SECTION 16: Other information

Abbreviations and acronyms:

CLP=	Classification, Labeling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL=	Derived No Effect Level
EWC=	European Waste Catalogue
LOW=	List of Wastes (List of Wastes Regulations 2005)
PNEC=	Predicted No Effect Concentration

Key literature references and sources of data:

Workplace Exposure Limits -2005. HSE EH40/2005  
 Workplace Exposure Limits –Supplement 2007. HSE EH40/2005  
 EC Commission Directive 2001/58/EC  
 EC Commission Regulation 1907/2006  
 and amendment EC 987/2008

**Disclaimer:**

*To the best of our knowledge, the information contained herein is accurate. However, it shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their own judgement in determining its appropriateness for a particular purpose.*