

# OLIVINE

The substance is not classified as hazardous under the CLP Regulation (1272/2008/EC) or as dangerous under the Dangerous Substances Directive (67/548/EEC), 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:        | Olivine                               |
| Product Description: | Magnesium Iron Silicate               |
| EINECS:              | 215-281-7                             |
| CAS:                 | 1317-71-1                             |
| 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, non slip aggregate |
|--------------|---|
- 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 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 |
|-----------------|----------------|
- Classification according to Directive 67/548/EC (DSD)
- |                 |                |
|-----------------|----------------|
| Classification: | Not classified |
|-----------------|----------------|
- 2.2 Label Elements
- 2.2.1 Labeling according to Regulation (EC) No. 1272/2008
- None
- 2.2.2 Labeling according to Directive 67/548/EEC
- 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.

## SECTION 3: Composition/information on ingredients

### 3.1

| Product/Ingredient<br>Name | Identifiers                      | %    | Classification |                 | Type |
|----------------------------|----------------------------------|------|----------------|-----------------|------|
|                            |                                  |      | 67/548/EEC     | 1272/2008 [CLP] |      |
| Olivine                    | EC:215-281-7<br>CAS:1317-71-1    | 100% | Not Classified | Not Classified  | [*]  |
| Forsterite                 | EC: 239-169-2<br>CAS: 15118-03-3 | 93%  | Not Classified | Not Classified  | [A]  |
| Fayalite                   | EC: 237-687-3<br>CAS: 237-687-3  | 7%   | Not Classified | Not Classified  | [A]  |

#### 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

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

### 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: Pale Green |
|     | Odour   | Odourless  |
|     | Odour threshold   | Not applicable                                   |
|     | pH  | Not applicable                                   |
|     | Melting point   | 1400-1700°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)                      | 3.3  |
|     | Solubility  | Negligible                                       |
|     | 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

Olivine sand is produced from the rock dunite. In the rock small amounts of fibrous minerals can be found, first of all in the mineral group of inosilicates such as pyroxenes, amphiboles and other fibres, which share some similarities with asbestos fibres. Each imported shipment of Olivine is tested in accordance with the Health and Safety Executive's HSG248 by an approved laboratory to ensure that the quantity and types of fibre found in the material do not present a significant risk to health.

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.*