RAYMOND BROWN
QUARRY PRODUCTS

# MATERIAL SAFETY DATA SHEET
# NATURAL AGGREGATES

## 1. IDENTIFICATION OF SUBSTANCE / MIXTURE & COMPANY / UNDERTAKING

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| Name of substance: | Natural Aggregates |
| Product identification: | Natural aggregates consist of rock fragments in their natural state which have been subjected to mechanical processing such as crushing, washing and / or sizing |
| Company identification: | Raymond Brown QUARRY PRODUCTS LTD<br>2nd Floor, Fryern House, 125 Winchester Road, Chandler's Ford<br>Hampshire, SO53 2DR<br>www.rbquarryproducts.co.uk |
| Emergency Contact Details: | T: 023 8027 3750 (Mon—Fri, 8am – 5pm) ask for H&S contact |

## 2. HAZARD IDENTIFICATION

Hazard Classification:

NOT classified as dangerous in accordance with Directive 67/548/EEC or EC 1272/2008.

This product gives the potential for generation of respirable dust during processing, handling and use, particularly through crushing, drilling, cutting, loading and unloading bulk aggregates, or if supplied as a fine powder.

Dust may contain respirable crystalline silica (quartz). Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

Long—term exposure to respirable dust can constitute a long term health hazard and lead to respiratory system damage and disease.

Repeated inhalation of excessive amounts of respirable silica may cause silicosis.

Some sand aggregates are unsuitable for sand blasting operations as they may break down, producing respirable dust containing quartz.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Natural Aggregates are produced from naturally occurring sand and gravel mineral deposits. The exact mineral composition and characteristics depend on the type of mineral deposit, and will vary from source to source.

Natural aggregates may contain low levels of respirable crystalline silica in the form of natural Silica Dioxide as Quartz.

Crystalline Silica has the following hazard information:

| Substance Name | EC No | CAS No | % | CLP Classification |
|---|---|---|---|---|
| Quartz ($SiO_2$) | 238-878-4 | 14808-60-7 | Variable | H372, H350 |

## 4. FIRST AID MEASURES

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| Inhalation | Immediately remove to fresh air. If breathing difficulties persist, seek medical attention. |
| Skin Contact | Wash with water. Prolonged contact may cause irritation. If symptoms persist, seek medical attention. |
| Eye Contact | Do not rub eyes, as the material is abrasive and may scratch the surface of the eye. Immediately and thoroughly irrigate with eye wash solution or clean water. If symptoms persist, seek medical attention. |

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| Ingestion | Ingestion of significant quantities of aggregate that could cause harm is unlikely. Do not induce vomiting. Give water to drink. Seek medical advice if feeling unwell. |

## 5. FIRE FIGHTING MEASURES

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| Suitable / unsuitable extinguishing media | Substance is not flammable or combustible. No unsuitable extinguishing media. |
| Special hazards arising in fire | None |
| Special advise for fire fighters | None |

## 6. ACCIDENTAL RELEASE MEASURES

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| Personal Precautions | Avoid breathing in dust. Keep dust out of eyes. See Section 8 for guidance on personal protective equipment. See Section 7 for guidance on handling the product. |
| Environmental Precautions | Natural aggregates are inert, but dust and fine particles should be prevented from entering watercourses and drains. Deposition of dust on vegetation and surrounding property should be avoided controlling the release of dust at source. |
| Methods for Cleaning | Avoid dry sweeping which creates dust. Use vacuum cleaning where practicable, or suppress dust using water sprays before cleaning up. |

## 7. HANDLING AND STORAGE

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| Precautions for safe handling | Handle with care so as to prevent the generation of dust. Use gloves to prevent mechanical irritation. Consider manual handling when handling bagged product. |
| Safe storage | Materials should be stored to minimise the generation of airborne dust from wind whipping and material movement. Very fine dry product in bulk should be stored in enclosed silos. Bulk aggregate containing fine material (<3mm) should not be stored in the open unless conditioned with water to avoid dust generation. |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Take measures to prevent: Inhalation of excessive quantities of dust.

Exposure control limits:

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| Total Dust | WEL | 10mg/m$^3$ | 8hrs | TWA |
| Respirable Dust | WEL | 4mg/m$^3$ | 8hrs | TWA |
| Respirable Quartz | WEL | 0.1mg/m$^3$ | 8hrs | TWA |

Control measures: Use in well ventilated areas. Dust should be controlled by containment, suppression and extraction/ filtration where possible. Regular monitoring should be undertaken to identify where people may be exposed to respirable dust so that further measures can be implemented to reduce exposure.

Respiratory Protection  : Suitable respiratory protection should be used where ventilation is not sufficient to protect against inhalation of dust. A filter type of P3 or equivalent is recommended.

Hand Protection  : Gloves should be worn to avoid abrasion of the skin when handling the product. Hands should be washed thoroughly before handling or eating food or drink.

Eye  : Goggles or protective glasses should be worn to prevent dust entering the

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| Protection | eyes if required. |
| Skin Protection |  Overalls to protect skin and clothes. The use of skin barrier cream is also recommended. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance | Granular solid |
| Odour | None |
| pH | Various |
| Boiling Point / Range | Not determined |
| Melting Point / Range | Not determined |
| Flash Point | N/A |
| Auto Flammability | N/A |
| Flammability | N/A |
| Explosive Properties | N/A |
| Oxidising Properties | Not determined |
| Vapour Pressure | N/A |
| Relative Density | Various |
| Water Solubility | Dependant on rock type |
| Fat Solubility | Not determined |

## 10.STABILITY AND REACTIVITY

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| Reactivity and chemical stability | Stable at normal temperatures and under recommended storage conditions. |
| Conditions to avoid | None |
| Materials to avoid | Strong acids (for limestone based aggregates) |
| Hazardous Decomposition Products | Generally none. Limestone aggregates may react with acid groundwater to release carbon dioxide gas, which may build up in confined spaces to hazardous concentrations. |

## 11.TOXICOLOGICAL INFORMATION

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| Acute Toxicity | None |
| Inhalation | If inhaled over a prolonged or extended period, respirable dust from natural aggregate can lead to respiratory system damage and disease such as cough, breathlessness and lung fibrosis. |
| Skin Contact | Prolonged contact with skin may cause irritation and dryness, which may lead to dermatitis. |
| Eye Contact | Long term contact with eyes may irritate and scratch eyes and cause eye damage. |
| Ingestion | Unlikely to cause problems |
| Specific Target Organ Toxicity – repeated exposure | Respirable crystalline silica has been associated with the lung disease silicosis. |
| Carcinogenicity | Respirable crystalline silica is classified as a Group 1 carcinogen, therefore long term exposure may cause cancer. |

## 12.ECOLOGICAL INFORMATION

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| Environmental Assessment | When used and disposed of as intended, no adverse environmental effects are foreseen. Aggregates are naturally occurring, inert minerals and do not pose a significant ecological hazard. |
| Mobility | Aggregates are non-volatile, inert materials that will sink in water and form a layer on the surface of the ground. Dust may become airborne, leading to deposition on vegetation and subsequent damage. |
| Persistence and Degradability | Aggregates are resistant to degradation and will persist in the environment. |
| Ecotoxicity | Not expected to be toxic to aquatic organisms. |
| Bioaccumulative potential | N/A |
| Results of PBT and vPvB assessment | Do not meet PBT or vPvB criteria. |

## 13.DISPOSAL CONSIDERATIONS

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| Waste treatment methods | Aggregates are inert waste and can be disposed of as normal industrial waste in accordance with waste regulation. It is recommended that it be disposed of via recycling or reuse. |

## 14.TRANSPORT INFORMATION

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| Special Carriage Requirements: | None – not classified as dangerous for transport. Open vehicles should be sheeted to avoid dust nuisance. |

## 15.REGULATORY INFORMATION

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| Classification | Not classified as dangerous. However, consideration of the following Hazard & Precautionary Statements is recommended: |
| EC1272/2008 | Hazard Statements:<br>H317 – May cause skin irritation<br>H332 – Harmful if inhaled<br>H335 – May cause respiratory irritation<br>H350 – May cause cancer<br>H372 – Causes damage to organs through prolonged or repeated exposure (relates possible lung damage if exposed to respirable silica).<br><br>Precautionary Statements:<br>P261 – Avoid breathing dust<br>P281 – Use personal protective equipment as required (see Section 8) |

## 16. OTHER INFORMATION

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| Training advice | Wear and use of appropriate PPE |
| Recommended Use and Applications | Industrial and construction applications |
| Further Information | HSE Guidance Note EH74/4 and EH75/5<br>PPE Regulations 1992<br>COSHH Regulations 2002<br>Environmental Protection Act 1990<br>HSE Control of exposure to silica dust (2013)<br>Labelling and Packaging Regulations (CLP) EC1272/2008<br>European Chemicals Agency Database |

Legal Notice

The information in this Safety Data Sheet was believed to be correct at the time of issue. However, no warranty is made or implied as to the accuracy or completeness of this information. If you have purchased this product for supply to a third party for use at work, it is your duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet.

If you are an employer, it is your duty to tell your employees and others who may be affected of any hazards described in this sheet and any of the precautions which should be taken.

This Safety Data Sheet does not constitute the user's own assessment of workplace risk, and it is the user's sole responsibility to take all necessary precautions when using this product.