1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product identification**
Natural Aggregates consisting of rock fragments in their natural state which have been subjected to mechanical processing such as crushing, washing and sizing.

**Identified uses of the substance or mixture**
Uses in a variety or construction and non-construction applications such as
- Fill materials including single size and graded, unbound or bound fill materials
- The manufacture of ready-mixed and pre-cast concrete
- The manufacture of Bituminous mixtures for road construction and surfacing

**Company Identification**
Aggregate Industries UK Ltd
Bardon Hall
Copt Oak Road
Markfield
Leicestershire
LE67 9PJ
United Kingdom

**Emergency Contact Details**
Telephone: 01530 510066
(Mon-Fri, 8am to 5pm) ask for H&S Team
Email: health.safety.team@aggregate.com

2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**
Not classified as hazardous according to Regulation (EC) No. 1272/2008
This product gives the potential for generation of respirable dust during handling and use. Dust may contain respirable crystalline silica. Prolonged inhalation of respirable dust can constitute a long term health hazard such as lung fibrosis. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. Repeated inhalation of excessive amounts of respirable silica may cause silicosis.

**Labelling**
The product does not need to be labelled in accordance with EC directives or respective national laws.
3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Natural Aggregates are a mixture of rock fragments from a wide variety of rock types including:

- Granite(s)
- Basalt
- Limestone
- Gritstone
- Sandstone
- Others

Therefore exact composition can vary from source to source.

However, these rocks may contain low levels of respirable crystalline silica in the form of natural Silica Dioxide as Quartz. Natural Aggregates from Quartzite, Sandstone, sand and Gravel will have higher levels of Respirable Crystalline Silica.

Crystalline Silica has the following hazard information:
For the full text of the H-Statements mentioned in this Section, see Section 16.

<table>
<thead>
<tr>
<th></th>
<th>Respirable Crystalline Silica (Quartz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No</td>
<td>14808-60-7</td>
</tr>
<tr>
<td>EC No</td>
<td>238-878-4</td>
</tr>
<tr>
<td>Index No</td>
<td>[-]</td>
</tr>
<tr>
<td>Classification</td>
<td>STOT RE 2; H373i</td>
</tr>
<tr>
<td>Concentration</td>
<td>Variable dependent on source</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

Inhalation
Remove to fresh air and allow person to rest. If recovery is not rapid obtain prompt medical attention.

Skin Contact
Remove any contaminated clothing. Wash with soap/cleanser and rinse with plenty of water. If irritation persists, obtain prompt 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 water. Seek medical attention if irritation persists.

Ingestion
Ingestion of significant quantities of aggregate that could cause harm is very unlikely. If material enters the mouth, do not induce vomiting. Give plenty of water to drink. Seek medical attention if feeling unwell.
5. FIREFIGHTING MEASURES

Suitable/Unsuitable extinguishing media
Material is not flammable or combustible. Use media suitable for other any other materials present that may be involved in a fire. There is no unsuitable fire extinguishing media.

Special hazards arising in a fire
None

Special Advice for fire fighters
None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Avoid breathing dusts and excessive physical contamination.

Environmental precautions
Entry into watercourses should be avoided so far as is possible.

Methods and materials for containment and cleaning up
Spray with water to prevent the generation of dust. Do not dry sweep residues. Contain so as to avoid the generation of dust (i.e. cover or enclose).

7. HANDLING AND STORAGE

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

CONTROL PARAMETERS

Components with workplace exposure limits (WELs)

<table>
<thead>
<tr>
<th>Component</th>
<th>WEL (8Hr TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Inhalable Dust</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Respirable Dust</td>
<td>4 mg/m³</td>
</tr>
<tr>
<td>Respirable Crystalline Silica</td>
<td>0.1 mg/m³</td>
</tr>
</tbody>
</table>

It is recommended that occupational monitoring be completed to determine exposure.

EXPOSURE CONTROLS

Appropriate engineering controls

Use in well ventilated areas. Use mechanical ventilation in poorly ventilated areas.

Eye/face protection

Eye Protection in the form of safety glasses and/or goggles is required.

Hand Protection

Handle with gloves. Recommend use of impervious heavy duty gloves. Gloves should be removed and hands thoroughly washed before handling or eating any food or drink.

Skin Protection

Overalls / Impervious clothing, selected according to the workplace conditions.

Respiratory Protection

Suitable dust masks should be worn in enclosed spaces where adequate ventilation is not provided. The Chemical Agents Directive shows a requirement for respirators as a means of control should use a particulate filter type P3 or equivalent.
9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties will vary dependent on rock type, but generic properties are as follows:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Granular Solid</td>
</tr>
<tr>
<td>Odour</td>
<td>None</td>
</tr>
<tr>
<td>pH</td>
<td>Various</td>
</tr>
<tr>
<td>Boiling Point / Range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting Point / Range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto Flammability</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Above 2.0</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Dependent on rock type</td>
</tr>
<tr>
<td>Fat Solubility</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

**Reactivity and Chemical stability**

Stable at normal temperatures and under recommended storage conditions.

**Conditions to avoid**

None.

**Incompatible materials**

Strong acids (Limestone based aggregates).

**Hazardous decomposition products**

Generally None, However with specific reference to limestone based aggregates, these may react with acidic groundwater to release carbon dioxide gas.
11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity
None.

Eye Damage
Long term contact with eyes can cause eye irritation and damage.

Skin corrosion/irritation
Long term contact with skin may cause mechanical skin irritation and possible dermatitis.

Respiratory sensitisation
Chronic exposure by inhalation may cause cough, breathlessness and lung fibrosis.

Specific target organ toxicity - repeated exposure
Prolonged exposure of Respirable Crystalline Silica fraction by inhalation may lead to silicosis in lungs.

Carcinogenicity
IARC classified respirable crystalline silica as a Group 1 carcinogen, therefore long term exposure may cause cancer.

Ingestion
Not likely to cause long term problems.

12. ECOLOGICAL INFORMATION

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
Not applicable.

Results of PBT and vPvB assessment
Will not meet PBT or vPvB criteria.
13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

Product

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.

Contaminated packaging

Dispose of as industrial waste.

14. TRANSPORT INFORMATION

Special Carriage Information

None. This product is NOT classified as dangerous for transport.

Open bulk vehicles used to carry the product should be sheeted to avoid the generation of dust.

15. REGULATORY INFORMATION

Classification

Not classified as dangerous. However, consideration of the following Hazard & Precautionary Statements is recommended:

Text of H-code(s) and R-phrase(s) mentioned in Section 3

H373i May cause damage to organs through prolonged or repeated exposure by inhalation.

Safety, health and environmental regulations/legislation specific for the substance or mixture

Health & Safety at Work etc. Act 1974

Control of Substances Hazardous to Health Regulations 2002 (as amended)

Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)

EH40/2005 Workplace Exposure Limits (as amended)

HSE Crystalline Silica EH59
16. OTHER INFORMATION

Training and Advice
Wear and use appropriate PPE

Recommended restrictions on use
Use in accordance with manufacturer's technical instructions.

Further Information
Contact the Aggregate Industries Health & Safety Team.

Key Data used to compile data sheet
Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)
EH40/2005 Workplace Exposure Limits (as amended)
HSE Crystalline Silica EH59