

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

#### Producer

Northstone (NI) Limited  
Materials Division  
Head Office  
Shinny Road  
Macosquin  
Coleraine  
BT51 4PS  
Northern Ireland

#### Contact Details

Tel: 028 7032 1100  
E-mail: info@northstone-ni.com

#### Application

Natural aggregates are used as a basic construction material and as a component of other materials, such as concrete, coated macadam and hot rolled asphalt.

#### Physical And Chemical Characteristics

These products are manufactured from natural rock which has been crushed and screened into various sizes. Products are generally grey/black in colour and granular shaped in appearance. Primarily supplied in bulk loads. Can also be supplied in 1tonne bulk bags or 25kg bags.

### 2. HAZARD IDENTIFICATION

Not classified as hazardous according to Regulation (EC) No. 1272/2008.

Handling, crushing, drilling, or sawing of natural aggregates, or products containing them, can produce dust. If inhaled in excessive quantities over extended periods, respirable dust can constitute a long-term health hazard. If aggregate contains free silica (quartz or SiO<sub>2</sub>), hazardous silica dust may be produced. If inhaled in sufficient quantity, respirable dust containing silica can constitute a serious health hazard.

Breaking, drilling or cutting natural aggregates, or products containing them, can give rise to projectiles and subsequent injury to the eyes or other parts of the body.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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.

### 4. 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 (dust)

Rinse with plenty of water. In case of irritation, seek medical advice.

#### • Eye contact (projectiles)

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. FIRE FIGHTING MEASURES

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

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Avoid breathing dusts and excessive physical contamination.

#### Environmental precautions

Accidental release of product into watercourses should be avoided in order to prevent the release of high suspended solids, particularly from products containing large amounts of fines, such as quarry dust.

Avoid dry sweeping which creates dust. Spray with water to prevent airborne dust. Sweep or shovel up and transfer into suitable receptacles for disposal. If dust becomes airborne, wear a dust mask or respirator.

#### 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 OF PRODUCTS

Product should be handled and stored using suitable methods in order to prevent or minimise the creation of airborne dust. Wet dust suppression techniques should be used wherever possible, e.g., applying water when sawing. Where airborne dust is unavoidable or excessive, engineering controls, such as containment and local exhaust ventilation, should be applied, particularly when airborne dust and/or silica exposure levels are approached.

The preferred method of handling is by mechanical means. If the product is supplied bagged, please note that the bags are heavy (25kg) and appropriate methods of manual handling should be employed if mechanical means of lifting are not available.

Where natural aggregates are stored on contract sites in areas accessed by the public, suitable notices / signs / barriers should be erected to avoid accidents.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace exposure limits (WELs)

Component	WEL (8Hr TWA)
Total inhalable dust	10 mg/m <sup>3</sup>
Respirable dust	4 mg/m <sup>3</sup>
Respirable crystalline silica	0.1 mg/m <sup>3</sup>

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 source, but generic properties are as follows:

Appearance	Granular solid
Odour	None
pH	Various
Boiling point/range	Not determined
Melting point/range	Not determined
Flash point	Not applicable
Flammability	Not applicable
Auto Flammability	Not applicable
Explosive properties	Not applicable
Oxidizing properties	Not determined
Vapour pressure	Not applicable
Relative density	Above 2.0
Water solubility	Dependent on rock type
Fat solubility	Not determined

## 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

### 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.

## 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.

## 15. REGULATORY INFORMATION

Classification: **Not classified as dangerous.**

However, consideration of the following Hazard & Precautionary Statements is recommended:

Silica dust may cause damage to organs through prolonged or repeated exposure by inhalation.

### **Safety, health and environmental regulations/legislation**

- Health & Safety at Work order 1978
- Control of Substances Hazardous to Health Regulations (NI) 2005
- 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 Northstone 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.

Purchasers of products covered by this sheet, who supply third parties, have a duty to ensure that the information on this sheet is passed on to them.

If you are an employer, you have a duty to inform your employees, and any others who may be affected, of the hazards and precautions that should be taken regarding the supply and use of the products covered on this sheet.

Possession of this Product Data Sheet does not constitute a risk or COSHH assessment.

The data and advice given above apply when these products are used as intended.