

PRODUCT: NATURAL AGGREGATES

PRODUCER

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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.

MAIN HAZARDS

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 SiO₂), hazardous silica dust may be produced. If inhaled in sufficient quantity, respirable dust containing silica can constitute a serious health hazard. See Table 1 below for approximate silica content of aggregates supplied by Northstone.

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.

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.

FIRST AID MEASURES

- **Airborne dust**
 Move to fresh air. Seek medical advice if you feel unwell.
- **Skin contact**
 Wash skin with water.
- **Eye contact (dust)**
 Rinse with plenty of water. In case of irritation, seek medical advice.

Aggregate Type	Supplying quarry	Source of free silica	Approximate % free silica	Risk
Greywacke (colloquially termed gritstone)	North Down	Quartz grains within rock	34.0	Moderate
Basalt	Croaghan	Possible minor secondary silica mineralisation	0.1	Very low
	Ballymena		0.0	
	Moneymore		0.0	
	Carrickmore		1.5	
	Mountfield		8.9	Low
White limestone (chalk)	Carmean	Flint	1.9	Very low

- **Eye contact (projectiles)**

Seek medical attention immediately.

Dust, total respirable: UK EH40: WEL 4mg/m³
8h TWA

- **Ingestion**

Not applicable.

Silica, total respirable: UK EH40:WEL
0.1mg/m³ 8h TWA

FIRE FIGHTING MEASURES

None needed.

ECOLOGICAL INFORMATION

These products are of naturally occurring materials and have no known ecological effect.

SPILLAGES

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.

TRANSPORTATION

The carriage of these products is not subject to the Hazardous Substance Conveyance Regulations and vehicle labelling is not required.

ENVIRONMENTAL MEASURES

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.

REGULATORY INFORMATION

The following guidance notes should be consulted and referred to prior to using the product.

Dispose of product and any packaging supplied in accordance with local authority requirements.

It is recommended that natural aggregate surplus to requirements is used as fill material on the installation site. Transport of surplus material from the site must be in accordance with Duty of Care requirements.

- **Occupational Exposure Limits EH40**
- **Local Exhaust Ventilation HS(G)37**
- **Dust, General Principles of Protection EH44**
- **Waste Management – The Duty of Care Regulations**
- **Manual Handling Operations Regulations (1992)**

EXPOSURE CONTROLS

All in accordance with The Personal Protective Equipment Regulations (1992).

OTHER INFORMATION

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.

- **Personal protection**

Respiratory protection to HSE approved standard.

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.

- **Eye protection**

HSE approved standard for dust and projectiles.

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

- **Occupational exposure**

Dust, total inhalable: UK EH40:WEL 10mg/m³
8h TWA

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

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