

**PRODUCTS: LIMESTONE CHIPPINGS**  
**LIMESTONE GRITS**  
**LIMESTONE SAND**

**PRODUCER**

Northstone (NI) Limited  
Quarry & Asphalt Division  
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**APPLICATION**

Limestone aggregate is used in the production of white concrete. Limestone chippings of 6.3/10mm size are used for dashing. Size 2/4mm and 4/6mm limestone grits are used as dashing grits. Size 1/2mm limestone grit is used as a constituent in animal feed preparations and fertilisers. Size 2/4mm limestone grit is used as a hen grit.

**PHYSICAL AND CHEMICAL CHARACTERISTICS**

These limestone products are manufactured from natural limestone rock which has been crushed and screened into various sizes. Limestone is a naturally occurring mineral that is composed principally of Calcium Carbonate (chemical formula  $\text{CaCO}_3$ ). Products are white in colour and of granular shape in appearance.

**MAIN HAZARDS**

Crushing, drilling, hammering, sawing, breaking or handling natural aggregates, or products containing natural aggregates, can produce dust. If inhaled in excessive quantities over extended periods, respirable dust can constitute a long term health hazard.

Crushed limestone aggregates produced at Carmean contain small amounts of naturally occurring silica (quartz or  $\text{SiO}_2$ ) in the form of flint. Crushing, drilling, hammering, sawing, breaking or handling natural aggregates containing silica, or products containing such aggregates, can produce hazardous silica dust. If inhaled in sufficient quantity, respirable dust containing silica can constitute a health hazard. Recent analyses indicate that Carmean Limestone contains 1.9% free silica (mean of 5 results, range 0.7–3.1%). This is considered to present a very low risk if the product is handled according to best practice and advice contained within this safety data sheet.

Crushing, drilling, hammering, sawing or breaking of natural aggregates, or products containing natural aggregates, can give rise to projectiles and subsequent injury to the eyes or other parts of the body.

**FIRST AID MEASURES****• Airborne Dust**

Move to fresh air. Seek medical attention 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.

**• Eye Contact (projectiles)**

Seek medical advice immediately.

**• Ingestion**

Not applicable.

**FIRE FIGHTING MEASURES**

Not considered to be a fire hazard, however, product will oxidise under intense heat (above  $825^\circ\text{C}$ ) to form Calcium Oxide (Burnt Lime,  $\text{CaO}$ ) which is highly alkaline and caustic. Calcium Oxide reacts violently with water, releasing heat in the process, to form Calcium Hydroxide (Slaked Lime,  $\text{Ca}(\text{OH})_2$ ) which is alkaline and caustic.

**ACCIDENTAL RELEASE MEASURES****• Personal Protection**

In the event of accidental release, dust may become airborne. Wear dust mask/respirator in accordance with The Personal Protective Equipment Regulations (1992).

**• Environmental Measures**

None applicable.

**• 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.

**WHEN DUST MAY BE CREATED**

Dust may become airborne in the handling of this product. Where 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.

**HANDLING AND STORAGE**

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.

Store product under cover in dry conditions.

Do not store near acids.

**EXPOSURE CONTROLS**

All in accordance with the Personal Protective Equipment Regulations (1992) with reference to:

- **Personal Protection**

Respiratory protection to HSE approved standard

- **Eye Protection**

HSE approved standard for dust and projectiles

- **Occupational Exposure**

Dust, total inhalable: UK EH40:WEL 10mg/m<sup>3</sup> 8h TWA

Dust, respirable: UK EH40:WEL 4mg/m<sup>3</sup> 8h TWA

Silica, total respirable: UK EH40:WEL 0.1mg/m<sup>3</sup> 8h TWA

**PHYSICAL AND CHEMICAL PROPERTIES**

Product is stable and inert under normal ambient conditions.

Product will react violently with acids to liberate Carbon Dioxide (CO<sub>2</sub>) gas.

Information on trace heavy metal content (Pb, As, Hg & Cd) is available on request.

**ECOLOGICAL INFORMATION AND DISPOSAL CONSIDERATIONS**

These products are of a naturally occurring material. In its dissolved state it is a natural and indispensable component of natural (hard) waters, therefore detrimental effects to the environment can be excluded.

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

**TRANSPORTATION**

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

**REGULATORY INFORMATION**

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

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

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.

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