

## MATERIAL SAFETY DATA SHEET & HANDLING INFORMATION

### PACKAGED BRICKS (all size formats) & PAVERS

**These products are NOT classified as hazardous in accordance with CLP regulations however the following information regarding the materials contained within the products may be of assistance to people handling packs, packaging and product.**

#### IDENTIFICATION OF THE SUBSTANCE & COMPANY

Ibstock Clay facing bricks, Special Shaped bricks, Engineering bricks, Pavers and Large Format bricks.

**Company name:** Head Office; Ibstock Brick Limited. Leicester Road. Ibstock. Leicestershire. LE67 6HS. Tel: 01530 261999

- COMPOSITION/INFORMATION ON INGREDIENTS**

Fired clay; Not hazardous. General airborne dust will be emitted when dry:

Crystalline Quartz Silica (released when dry cut); up to 30%

Other ingredients determined not to be hazardous; 70%

- HAZARDS IDENTIFICATION**

Fired clay brick is an inert material, which presents no risk to health and safety through handling or use, subject to good site practice being followed.

The use of safety clothing such as safety hats, boots and industrial gloves is strongly recommended whenever practicable, to minimise the risks associated with falling objects and sharp edges. A general risk assessment what control measures will be adopted.

If bricks are hit with a trowel, bolster, scutch, etc., sharp vitrified clay chips may fly and damage eyes, suitable eye protection should be worn.

Individual bricks are grouped together into packs. Packs are heavy and great care should be taken in their handling. Equipment used for lifting packs must be adequate for the weight involved. The weight of the pack varies according to the size of the product and quantity per pack, but the maximum weight of each standard pack from Ibstock Brick Limited factories is approximately 1.9 tonnes.

#### **Crystalline Quartz Silica (Quartz – Silicon Dioxide SiO<sub>2</sub>) -**

This component is not released under normal usage conditions but when cutting clay bricks or blocks, wet cutting will reduce the levels of airborne dust being released and therefore lower exposure levels for respirable crystalline silica. Our advice would be to avoid dry cutting of bricks wherever possible. Wet cutting reduces the amount of dust generated and is a preferable method of cutting.

If cutting machinery is required we recommend a diamond tipped blade and dust suppression kit, preferably bench mounted or the brick should be firmly held by a mechanical clamp or similar device to prevent movement.

Pavers can also be cut with a masonry block splitter (hydraulic or lever type).



#### **Signal word**

Danger

#### **Hazard statement(s):**

H373: May cause damage to lung through prolonged or repeated exposure by inhalation

#### **Precautionary statement(s)**

P260 Do not breathe dust

P202 Do not handle until all safety precautions have been read and understood

P285: In case of inadequate ventilation wear respiratory protection.

P501 Dispose of contents in accordance with local regulation

- FIRST AID MEASURES**

**Skin contact:** Minor cuts and grazing can occur on sharp edges. Wash with clean non-abrasive soap and water. Treat with normal antiseptic if required. Prolonged cutting or handling without suitable hand protection can result in drying and cracking of the skin.

**Eye contact:** rinse with potable water or eyewash until foreign particles are removed. Do not rub eyes. If problems persist, seek medical advice.

**Ingestion:** Rinse mouth with water.

**Inhalation:** If cutting with mechanical dry cutter and brick dust is inhaled, irritation and coughing may result. Move to fresh air. Drink potable water to ease. Long term inhalation of silica in brick dust can be harmful to health. Wear a suitable mask. If symptoms persist, seek medical advice.

- **FIRE FIGHTING MEASURES**

Product not flammable

Packaging may be flammable: Extinguish fires using a suitable fire extinguisher for the environment.

- **ACCIDENTAL RELEASE MEASURES**

Wet swab spilled material. Scrape into a sealed container and label.

- **EXPOSURE CONTROL/PERSONAL PROTECTION**

**Workplace exposure limits:** Under the COSHH Regulations, the Workplace Exposure Limit (WEL) for respirable silica is 0.1mg/m<sup>3</sup>. Total Inhalable dust is 10mg/m<sup>3</sup> and Respirable dust is 4mg/m<sup>3</sup> (from October 2006). The only reliable way to ascertain the levels of individual exposure during cutting is to carry out detailed personal monitoring.

**Engineering measures:** Where possible wet cut when cutting clay brick or blocks.

**Respiratory protection:** Wear suitable face mask when cutting. A suitable respirator or disposable mask (FFP-3) meeting BS EN 149 (Specification for Filtering Half Masks to Protect Against Particles) is recommended. The use of appropriate respiratory protection by those working near to the dry cutting operation should be considered.

**Skin protection:** Dust may cause skin irritation.

**Hand protection:** wear suitable gloves and barrier cream to avoid abrasion.

**Eye protection:** wear suitable eye protection when cutting.

**Ear protection:** Suitable ear defenders should be worn by everyone in the vicinity of mechanical cutting machines.

The main effect in humans of the inhalation of respirable silica dust is silicosis. There is sufficient information to conclude that the relative lung cancer risk is increased in persons with silicosis therefore preventing the onset of silicosis will also reduce the risk of cancer. Since a clear threshold for silicosis development

cannot be identified, any reduction of exposure will reduce the risk of silicosis.

- **PHYSICAL AND CHEMICAL PROPERTIES**

Solid, inert fired clay material.

- **STABILITY & REACTIVITY**

All components stable under normal conditions.

- **TOXICOLOGICAL INFORMATION**

**Toxic Effects:**

**α-quartz (crystalline silica)** Silicosis

Evidence for human carcinogenicity

**Chronic Effects:** Long term respiratory exposure to airborne respirable crystalline silica may result in silicosis which is a disabling respiratory disease and decreased pulmonary function.

Coughing and discharging mucus.

- **ECOLOGICAL INFORMATION**

Not classified as environmentally hazardous.

- **DISPOSAL CONSIDERATIONS**

As per local authority requirements.

Redundant packing materials should be gathered together daily and placed in a waste disposal skips for removal to an approved tip.

The burning of any packaging materials is not normally permitted on sites; some plastic materials may give off harmful fumes. If permission is granted for the burning of wooden pallets great care must be exercised to ensure that environmental pollution controls are not contravened.

- **TRANSPORT INFORMATION**

No special toxicological requirements. Suitable offloading equipment required.

- **REGULATORY INFORMATION**

N/A

- **OTHER INFORMATION**

**OFF LOADING**

These packs may be delivered on disposable wooden pallets or they may be held together as a unit by plastic or steel straps. In both cases, the products may be contained by a plastic shrink-wrap, if requested by the customer.

All personnel involved in the handling of packs should be made aware that both steel and plastic straps could snap in certain circumstances, allowing the products to fall:

- **AVOID abnormal shocks to the packs**
- **AVOID sliding one pack against any face of another pack**
- **NOTE straps can deteriorate over a period of time**

The strapping, if provided must never be used to lift packs. Only use the holes in the packs or pallets provided. It is recommended that suitable handling forks should have a width of 90mm and be 1100mm long; it is also recommended that grabs should only be used on solid packs.

It is recommended that brick void packs should always be lifted via the void holes, by a fork lift truck or similar device. This allows for correct distribution of the pack weight under the void layer, which is the layer the straps are supporting. However quite often "side grabs" are used especially on lorries. It is recommended that the grab should ALWAYS pick the pack up on the NON STRAP side i.e. the brick header side and as near to the bottom of the pack as possible. This method ensures the grab has all the weight of the brick pack. The pack should NOT be

“grabbed” at the top of the pack because all the brick weight is left supported on the straps.

Wherever possible, packs should be placed singly on dry, level ground.

It may be possible to stack normal facing/engineering brick packs up to 3 high if they are carefully placed directly on top of each other, without touching adjacent packs, by a competent forklift driver, provided the stacking ground is hard, level and designed to carry the weight. If there are any indications of instability, such as the stack leaning, then the packs should be immediately re-stacked at ground level.

Any pallets supplied by the client to store or transport packs must be very close in size to the pack dimensions and must be of adequate strength to support the weight of product placed on it and take into account the weight of any other products stacked above it..

### **ON SITE HANDLING**

Some pack configurations (typically a 500 brick all header pack) can be split into 5 @ 100 brick legs or blades. These legs are only stable if stored or moved around while laid flat on a pallet - they must not be moved in the vertical position.

Where packs are lifted more than 1 metre above ground level, a safety cage of adequate dimensions around the pack should be used. All personnel must stand well clear of packs when they are being lifted or moved.

If it is considered necessary to store a brick pack above ground level, it should only be placed on a suitably designed staging with guard rails and brick nets of appropriate height to prevent any bricks falling to lower working areas.

### **PROCESSING**

Straps should be cut by wire cutters and not burst by the application of levered pressure. When cutting straps, the operative should stand to the side of the strap being cut and not in line with that strap. Highly tensioned straps can spring away from the package when tension is released. In accordance with the Personal Protective Equipment At Work Regulations 1992, persons cutting

wire strapping under tension MUST wear suitable eye protectors (reference: BS EN 166, 167 & 168).

Strapping around brick packs has sharp edges and suitable gloves should always be worn when handling this material. When straps are cut, protective footwear and overalls should also be worn

because bricks may fall from the pack, particularly if the pack has been subjected to irregular handling or storage.

### **MANUAL HANDLING**

An individual standard brick and paver typically weighs 2 to 3 kg (special shaped bricks may weigh more) and presents low risk of a manual handling injury.

Large Format Blocks can weigh up to 20kg and lifting is a two handed operation; we recommend that the HSE Information Sheet

Guidelines ('Manual Handling- What you need to know as a busy builder') be followed.

Repetitive handling of any product including bricks can give rise to Upper Limb Disorders such as muscular strains and sprains. Specialist help should be sought for anyone involved in this type of work

This sheet does not constitute an assessment of workplace risk.

Refer to HSE for guidance on working at height, mechanical and manual lifting and use of powered tools on sites and CN6 Cutting pavers, 'Manual Handling- What you need to know as a busy builder' , Cis 26 Cement, Cn3 drilling with hand held drills, COH 13 Use of water suppression when using cut off saws, Personal Protective Equipment at Work PPE I25.

**IT IS THE CUSTOMERS RESPONSIBILITY TO OBTAIN TECHNICAL DATA ON ALL MATERIALS TO BE USED IN CONJUNCTION WITH THESE PRODUCTS.**