



Concrete Safety Data Sheet

1. Identification of the substance/mixture and the company undertaking

Product Name	Concrete Products
Trading Name	Walling Stone, Cast Stone, Concrete Roof Tiles and Concrete Masonry
Company	Ibstock/Forticrete
Registered Office	Forticrete. C/o Ibstock Brick, Leicester Road, Ibstock, Leicestershire, LE67 6HS
Tel	01909 775000
E-mail	technical@Ibstock.co.uk
Web	www.Ibstock.co.uk

2. Hazards identification

According to Regulation (EC) No.1272/2008, Concrete items are classified as articles and therefore not classified as hazardous under EC/1272/2008.

Concrete products produced by Ibstock present minimal human health hazards. Risks to human health may arise when products are machined mechanically. This will release dust which may contain Quartz (Crystalline Silica) particles. The product does not need to be labelled in accordance with EC directives or respective national laws.

3. Composition/information on ingredients.

Precast concrete articles are classified as articles and therefore not notifiable and not reportable under EC/1907/2006.

Concrete products supplied by Ibstock are made from:

- Compacted fine or coarse aggregates (sand & limestone dust)
- Cements (Ordinary Portland Cement, Ground Granulated Blast Furnace Slag)
- Pigments (Iron Oxides)
- Admixtures and additives to aid curing, water resistance or modify the properties of the fresh or hardened concrete.

Substance name	EC No	%	DSD Classification	CLP Classification
Portland Cement	266-043-4	10-20%	Xi; R34, R38, R41, R43	H315, 317, 318, 335
Crystalline Silica	238 – 878 - 4	Variable	Xn; R48/20	H372

4. First-aid measures

Inhalation:

If concrete dust is inhaled, remove to fresh air. If breathing difficulties or inflammation is experienced, seek medical attention.

Skin Contact:

Where skin contact occurs with concrete dust, either directly or through saturated clothing, the concrete must be washed off immediately with soap and water.

Eye Contact:

Immediately and thoroughly irrigate with copious amounts of eye wash solution or clean water. Seek medical attention immediately.

Ingestion

Not applicable when intact. 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

Concrete is non-flammable and is not combustible.

Suitable Extinguishing Media: Not applicable.

Unsuitable Extinguishing Media: Not applicable.

Special Exposure Hazards in Fire: None.

Special Protective Equipment for Fire Fighters: None.

6. Accidental release measures

Personal precautions:

See section 8 for personal protective equipment and section 7 for guidance on handling the product.

Environmental precautions:

Prevent airborne concrete dust during mechanical machinery of any of the products.

Methods for cleaning

After any mechanical machinery of products ensure area is cleaned using suction or mechanical removal method.

7. Handling and storage

Handling

Products/packs may be delivered on wooden pallets and will be held together by either or a combination of plastic or steel strapping and shrink-wrapping (bag or sheeting). All persons involved with the transporting of packs/pallets need to be made aware, particularly when transporting overhead, that the strapping, shrink-wrapping or the pallet could fail which would allow the products to fall. Therefore additional load security method needs to be employed before overhead lifting i.e. contain the product in case of a failure. Exclusion zones need to be put in place to segregate pedestrians if overhead lifting is required. The strapping should not be used as an aid for lifting the packs. Those persons involved in the lifting and transporting of packs should be made aware that pre-formed void holes in the packs or the pallets provided should be used.

Storage

Concrete products should be off-loaded onto a firm level surface. Additional care should be taken when double / multiple stacking of pallets or packs of products. Where double or multiple stacking occurs (uniform solid packs) the stability of the stack should be assessed, any signs of instability, such as the stack leaning, should be investigated and corrected, and i.e. the packs/pallets should be re-stacked on firm level ground. Where packs/pallets are lifted more than 1 metre above ground level, a safety cage of adequate dimensions around the packs/pallets should be used. All personnel must stand well clear of packs/pallets when they are being lifted or moved.

Pack weights will vary dependant on type of product, size and quantity per pack. Equipment used for lifting packs of products should be checked for suitability to the weight involved.

8. Exposure controls/personal protection

Take measures to prevent:

In all circumstances where exposure to concentrations of dust is evident, such exposure must be reduced to as low as practicable using appropriate dust suppression, appropriate local exhaust ventilation, good standards of occupational hygiene, personal and respiratory protective equipment.

Total Dust	W.E.L	10mg/m ³	8 Hrs	T.W.A
Respirable Dust	W.E.L	4mg/m ³	8 Hrs	T.W.A
Respirable Quartz	W.E.L	0.1mg/m ³	8 Hrs	T.W.A

W.E.L = Workplace Exposure Limit

T.W.A = Time Weighted Average

Note: The only reliable way to ascertain the levels of individual exposure to both Inhalable and Respirable dust is to carry out personal monitoring.

Respiratory Protective Equipment (RPE) – Persons carrying out operations involving machining, e.g. cutting, drilling and polishing, must wear suitable respiratory protection. Consultation with equipment suppliers should be undertaken to ensure correct type and use. Ibstock advises that that dry cutting of concrete products is avoided wherever practicable. Wet cutting or the use of an extraction system reduces the amount of air-borne dust being generated.

Eye protection - should be worn to prevent dust entering eyes and also to protect against flying debris during splitting/breaking processes.

Hand Protection - Suitable gloves should be worn to protect against sharp edges and skin abrasion. Additionally hand skin protection should be worn to prevent contact with wet concrete dust or slurry.

Skin Protection: Overalls or similar should be worn to protect skin from contact with concrete dust. If dust contaminates clothing remove and wash before wearing again.

Footwear - Safety footwear should be worn to protect against falling blocks.



Manual Handling – Repetitive handling of concrete products can give rise to musculoskeletal disorders (MSDs) in particular sprains and strains which are often of the back. Care should be taken when handling and stacking concrete products. For each activity consideration should be given to the weight and stability of individual units or packs of product. Consideration should also be given to the handling and disposal of banding wires and tapes and all other packaging materials used. Further information on the manual handling of concrete products can be found in various HSE and industry information sheets, guidelines and regulations including Manual Handling Operations Regulations 1992

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Various colours, shapes and sizes
Odour: None
pH: Typically 10-12
Boiling Point / Range: Not determined
Melting Point / Range: Not determined
Flash Point: Not applicable
Auto Flammability: Not applicable
Flammability: Not applicable
Explosive Properties: Not applicable
Oxidising Properties: Not applicable
Vapour Pressure: Not applicable
Relative Density: Above 1.8Kg/m³
Water Solubility: Dependant on aggregate type
Fat Solubility: Not determined

10. STABILITY AND REACTIVITY

Conditions to Avoid: None
Materials to Avoid: None
Hazardous Decomposition Products: None

11. TOXICOLOGICAL INFORMATION

If inhaled over a prolonged or extended period, respirable dust from mechanical machining concrete can lead to respiratory system damage and disease. Respirable crystalline silica has been associated with the lung disease silicosis.

Skin

Repeated and prolonged contact with cured concrete products can cause abrasion to the skin. Many products will contain sharp edges. Due to the wide variation in shape, size and weight hazards associated with manual handling do exist. Handling items with concrete dust could cause irritation.

Eyes

Concrete dust in contact with eyes can cause irritation.

Inhalation

Mechanically machined concrete products (hardened concrete is cut, drilled, milled or planed) will release dust which may contain particles of quartz or silica. Inhalation of concrete may irritate the airways. Inhalation over a prolonged period of time of dust containing Respirable silica or quartz can give rise to silicosis/pneumoconiosis, a disease of the lungs leading to impaired breathing. The quartz content of the product will vary, and is related to the type of aggregate used in the production of the concrete. Advice on the quartz content and other chemical information is available from the supplying unit.

Ingestion:

Ingestion is very unlikely.

12. ECOLOGICAL INFORMATION

Environmental Assessment:

When used and disposed of as intended, no adverse environmental effects are foreseen and concrete should not pose a significant ecological hazard.

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13. DISPOSAL CONSIDERATION

Safe Handling of Residues/Waste Product: Concrete products are classed as non-hazardous and 'inert' but should be disposed of in accordance with local and national legal requirements. Concrete products can be readily recycled.

14. TRANSPORT INFORMATION

Special Carriage Requirements:

None – not classified as dangerous for transport.

15. REGULATORY INFORMATION

Not applicable to articles

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 Control of Exposure to Silica Dust INDG 463

16. Other information

This information is to the best of the company's knowledge, and is believed to be accurate and reliable at the date of issue.

It is the responsibility of the customer/user to obtain information, including, Health and Safety and technical on all materials used with our concrete products. Ibstock accepts no liability in respect of other materials used with our products.