



# Marshalls

## MATERIAL SAFETY DATA SHEET

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### 1) IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

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Identification of substance	Precast concrete products
Product description	Precast concrete paving, kerbs, channels, block paving, drainage channels, walling products & specific decorative products marketed under many different range names
Manufacturer/Supplier	Marshalls Landscape Division Landscape House Premier Way Lowfields Business Park ELLAND HX5 9HT
Telephone number	(01422) 312000

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### 2) HAZARDS IDENTIFICATION

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Most important hazards	Cutting of hardened products will produce excessive amounts of dust that will contain respirable Quartz, this may constitute a chronic health hazard. Long term prolonged exposure to high levels of respirable crystalline silica can also lead to an increased risk of developing silicosis and lung cancer. Any cutting or finishing can also result in particles being projected at high speed with the consequent risk of injury or damage.
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### 3) COMPOSITION/INFORMATION ON INGREDIENTS

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Description of the preparation	Sand, aggregate, cementitious material, pigments, admixtures and water are combined and processed to form dense concrete products.
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### 4) FIRST AID MEASURES

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General advice	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation (Dust)	Remove to fresh air and seek medical attention if required.
Skin contact	Wash skin thoroughly with soap and water or use a proprietary skin cleaner and apply suitable dressings.
Eye contact	Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.
Ingestion	If accidentally swallowed remove from exposure and seek medical attention if required.

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### 5) FIRE-FIGHTING MEASURES

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Suitable extinguishing media	Concrete is not flammable and will not facilitate combustion with other materials.
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## 6) ACCIDENTAL RELEASE MEASURES

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Personal precaution	In the event of dust release, avoid breathing in dust. Wear dust mask/respirator and goggles.
Environmental precaution	No danger, but material should be disposed of in accordance with local authority guidelines.
Method for cleaning up	No special requirements. Where possible use mechanical aids to reduce the risk of manual handling injury. Avoid sweeping that creates dust and vacuum dust where practical.

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## 7) HANDLING AND STORAGE

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### Handling

- Technical condition Products are delivered on pallets, shrink-wrapped in specially banded or designed packs or in "sausage wrap" depending on the product type.
- Safe handling advice The preferred method of off-loading from vehicles is by mechanical means, ensuring all lift apparatus and vehicles are capable of lifting the product within their working capacity. Care to be taken when placing packs etc into position avoiding dropping or banging. Banding **MUST NOT** be used as a lifting aid. Care should be taken when manually handling products. Good lifting practices should be followed at all times. Plan so that products are positioned near to the point of use. Mechanical handling devices should be considered with products over 20kg in weight.

### Storage

- Precaution All products must be stored on a firm level surface and not on slopes or soft uneven areas. The bottom layer of any non-palletted packs should not be laid directly onto the ground but placed either on timber or similar bearers, pallets or boards.
- Storage condition Firm, level surface – do not stack packs more than 4 high, however some decorative products are of irregular shape and an individual assessment should be made at the time of stacking.  
Soft, uneven surface – do not stack packs more than 2 high. An individual assessment should be made at the time of stacking as to the suitability of the ground.
- Packaging material Before removing shrink-wrapping or banding, ensure that the products are safe and will not fall over; end supports should be used where necessary.  
Shrink-wrapping should be cut not torn. Banding must be removed with care and should be cut with suitable clippers and not broken by hand. Wear suitable protective gloves and eye protection.  
Packaging could be slippery when wet.

**It is difficult to cover all situations and whoever is stacking the pallets must assess the risk on how high packs are stacked and their stability.**

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## 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

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Engineering measure	Use dust extraction if OES is exceeded	
Control parameter		
• Exposure limit	Total Inhalable Nuisance Dust	10.0mg/m <sup>3</sup>
	Total Respirable Nuisance Dust	4.0mg/m <sup>3</sup>
	Respirable crystalline Silica	0.10mg/m <sup>3</sup>
	All are given as maximum concentrations and expressed as an 8 hour time weighted average (8hr TWA).	
Personal protection equipment		
• Respiratory protection	Dust masks to a suitable BS or EN standard are recommended where operations may cause inhalation of the product.	
• Hand protection	Use suitable gloves.	
• Skin and body protection	Safety footwear should be worn to protect against injury from falling	

- Eye protection                      precast units.  
Safety goggles or face shield to a suitable BS or EN Standard are recommended where operations may cause product getting into eyes.
- Hygiene measure                      Wash hands before breaks and after finishing work.

## 9) PHYSICAL AND CHEMICAL PROPERTIES

### General information

- Appearance                      Solid
- Colour                              Grey if concrete is unpigmented
- Odour                                Odourless

### Important health, safety and environmental information

- pH                                      Alkaline >7
- Boiling point/range              Not applicable
- Flash point                        Not applicable
- Explosion limits                  Not applicable
- Relative density (water = 1)    Normal range 1.5 to 2.9
- Water solubility                  0.1% max. Generally considered insoluble in water
- Fat solubility                      Not applicable
- Solvent solubility                Not applicable

## 10) STABILITY AND REACTIVITY

Stability                                      Stable  
Hardened concrete will react with most acids in a neutralization-type reaction. Heat, spattering and evolution of potentially toxic gases (such as HCl, NO or NO<sub>2</sub>) may result depending on the acid involved. Prolonged contact of an acid with the concrete may cause etching or other damage.

Hazardous decomposition products    None

## 11) TOXICOLOGICAL INFORMATION

### General information

#### Acute toxicity

- Inhalation                          Dust inhaled over a prolonged period of time may give rise to a number of respiratory illnesses.
- Skin contact
- Eyes contact                        Dust caused by the cutting of hardened concrete may cause irritation.
- Ingestion

## 12) ECOLOGICAL INFORMATION

General information                      When used as intended, no environmental impact is anticipated.  
Environmental toxicity  
Other adverse effects

## 13) DISPOSAL CONSIDERATIONS

Waste/unused products                  Concrete is inert.  
Contaminated packaging                Shrink-wrapping must not be burnt, as toxic fumes are given off such as carbon monoxide, hydrocarbons and aldehydes.  
Timber pallets on which products are transported must not be used again for any other products.

Further information                      Waste should be disposed of in accordance with local and national waste disposal regulations.

## 14) TRANSPORT INFORMATION

Concrete is not classed as dangerous goods in any transport regulation.

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## 15) REGULATORY INFORMATION

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EC number	
Symbol	
R-phrases	
S-phrases	S22 – Do not inhale dust
Further information	Not classed as dangerous for supply in the UK.

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## 16) OTHER INFORMATION

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Accordinging legislation	Health & Safety at Work etc Act 1974 Consumer Protection Act 1987 Control of Substances Hazardous to Health Regulations (COSHH) 2002 Control of Substances Hazardous To Health (Amendment) Regulations 2004 Environmental Protection Act 1990 HSE Guidance Note EH40 (Workplace Exposure Limits) Manual Handling Operations Regulations 1992 (as amended) Chemicals (Hazard Information and Packaging for Supply) Regulation 2009
Text of R-phrases Important remarks	EH40: Workplace Exposure Limits A step-by-step guide to COSHH Assessment (HS(G)97) HSE Construction Information Sheet 37 "Handling Heavy Building Blocks" HSE Construction Information Sheet 57 "Handling Kerb – Reducing the Risks of Musculoskeletal Disorders" HSE Construction Information Sheet 36 "Silica" HSE Construction Information Sheet 54 "Dust Control on Concrete Cutting Saws Used in the Construction Industry"
Use of the substance/preparation Restrictions	
History	
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