



Marshalls

MATERIAL SAFETY DATA SHEET

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

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

2) HAZARDS IDENTIFICATION

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

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

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.

5) FIRE-FIGHTING MEASURES

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

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.

7) HANDLING AND STORAGE

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.

8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measure	Use dust extraction if OES is exceeded	
Control parameter		
• Exposure limit	Total Inhalable Nuisance Dust	10.0mg/m ³
	Total Respirable Nuisance Dust	4.0mg/m ³
	Respirable crystalline Silica	0.10mg/m ³
	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 NO₂) 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.

15) REGULATORY INFORMATION

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

16) OTHER INFORMATION

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

i.	First edition date	01/01/2006
ii.	Previous revision date	01/02/2009
iii.	Review date	01/01/2011
iv.	Version	3

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