



Material Safety Datasheet

PRECAST CONCRETE PRODUCTS

It is important that you, or any persons working for you or to whom you have supplied precast concrete products, become familiar with the information given on both pages of this datasheet before handling, using or disposing of the product(s).

Precast Concrete Products

1. Identification of substance/preparation and company

Company: CEMEX UK Operations Ltd
CEMEX House, Evreux Way
Rugby, Warwickshire CV21 2DT
Tel: 01788 542111 (out of hours 01932 568833)
Fax: 01788 540166

www.cemex.co.uk

Product:

Building Blocks/Masonry
Block Paving
Kerbs
Sleepers and other rail products
Roof Tiles
Drainage Products
Other associated bespoke concrete products

Revision date: November 2011

Hazard information

2. Composition/information on ingredients

Sand, Aggregate, Cementitious Material, Pigments, Admixtures & water are combined and processed to form dense or lightweight concrete products.

3. Hazards identification

Inhalation of silica particles in dust created by cutting set concrete or surface treatment of hardened concrete containing high silica aggregates may cause respiratory damage. Where respirable dust contains high quantities of free silica in the form of quartz, there is a risk of developing silicosis. The main symptoms of this chronic disease are difficulty in breathing and coughing. Long-term prolonged exposure to high levels of respirable crystalline silica, which can arise from a failure to implement adequate control measures, can also lead to an increased risk of developing lung cancer. Any cutting or finishing can also result in particles being projected at high speed with the consequent risk of injury or damage.

Emergency action

4. First aid measures

4.1 Eye contact:

On contact with concrete dust, immediately irrigate with eyewash solution or clean water. If symptoms develop, obtain medical attention.

4.2 Skin contact:

On contact with concrete dust, wash with soap and water. If irritation occurs seek medical attention.

4.3 Ingestion:

If ingestion of concrete dust causes problems, remove from exposure and seek medical attention if required.

4.4 Inhalation:

On inhalation of concrete dust, remove the affected person to fresh air and seek medical attention if required.

5. Fire fighting measures

Concrete is not flammable and will not facilitate combustion with other materials.

6. Accidental release measures

6.1 Personal Precautions (See 8.3.)

6.2 Cleaning Up:

No special requirements, where possible use mechanical aids to reduce the risk of manual handling injury.

6.3 Environmental Measures:

Does not constitute a significant environmental hazard.

Precautions

7. Storage & handling

7.1 Storage:

Stock areas should always be level with a firm base to avoid pallet collapse when the outer wrapping or bands are removed. As a safety precaution, we advise customers not to stack products. Care should be taken when removing shrinkwrapping or bands to avoid loose blocks, pavers etc falling out of the stack. Banding should be cut and not burst by the application of levered pressure. High tensioned straps can spring away when the tension is released.

Shrink-wrapping or plastic banding strips must not be burnt as toxic fumes are given off.

7.2 Handling:

• Concrete dust:

Avoid dry cutting concrete wherever possible. Wet cutting reduces the amount of dust generated and is a preferable method of cutting.

• Manual handling:

Care should be taken when manually handling precast concrete products. Good lifting practices should be followed at all times to avoid the risk of sprains, strains or ruptures. Plan so that, wherever possible, products are positioned near to the point of use. Where reasonably practicable, mechanical handling devices should be used for kerbs and all blocks heavier than 20kg. All paving slabs over 600 x 450mm plan size should be handled by 2 persons.

8. Exposure controls/personal protection

8.1 Workplace Exposure Limits:

Workplace Exposure Limits (WEL's) of 10mg/m³ total inhalable dust and 4mg/m³ respirable dust (8 hour TWA) are listed in EH40. A WEL of 0.1mg/m³ is stated for respirable silica (8 hour TWA).

8.2 Engineering Measures:

Where reasonably practicable dust exposures should be controlled by engineering methods, such as wet cutting and local exhaust ventilation.

8.3 Personal Protective Equipment:

a. Respiratory Protection:

Suitable respiratory protection (HSE approved standard) should be worn to ensure that personal exposure to the constituents of concrete dust is less than the relevant Workplace Exposure Limits. Always ensure good ventilation.

b. Hand and Skin Protection:

Gloves should be worn to protect against abrasions when handling precast concrete units. Safety footwear should be worn to protect against injury from falling precast units.

c. Eye Protection:

Goggles (HSE approved standard) that offer protection against dust and flying particles should be used when cutting or finishing precast concrete.

Product information

9. Physical & chemical properties

Odourless, solid concrete formed from a mixture of sand, aggregate, cementitious material, pigments, admixtures and water. Other chemical properties not applicable under ambient conditions.

10. Stability & reactivity

Conditions contributing to chemical instability: None

Hazardous decomposition products: None

Special precautions: None

11. Toxicological information

11.1 Short Term Effects:

Eye contact:

Dust caused by the cutting or surface treatment of hardened concrete may cause irritation.

11.2 Long Term Effects:

Inhalation:

Inhalation of mineral dusts over a prolonged period may give rise to a number of respiratory illnesses including, chronic bronchitis, pneumoconiosis and silicosis (if silica present). Long-term prolonged exposure to high levels of respirable crystalline silica, which can arise from a failure to implement adequate control measures, can also lead to an increased risk of developing lung cancer.

12. Ecological information

12.1 Aquatic Toxicity Rating:

LC50 aquatic toxicity rating not determined. No data is available on the preparations themselves. When used as intended, no environmental impact is anticipated.

12.2 Biological Oxygen Demand (BOD):

Not applicable

13. Disposal considerations

Disposal of these products should be in accordance with local legal requirements.

Additional information

14. Transport information

Not hazardous. Classification for conveyance – not required.

15. Regulatory information

Chemicals (Hazard Information and Packaging for Supply) Regulation.

Classification: Not classified as dangerous for supply in the UK.

16. Legislation & other information

- 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).
- Any authorised manual on First Aid by St.John's / St.Andrews / Red Cross
- Manual Handling Operations Regulations 1992 (as amended)

Prepared in accordance with UK REACH Competent Authority Information Leaflet 13 - REACH and SDS - May 2008.

Guidance references

Available from HMSO, HSE area offices, or local authority Environmental

Health Departments:

- EH40/: Workplace Exposure Limits
- A step-by-step guide to COSHH Assessment (HS[G]97)
- HSE Construction Information Sheet No 37 "Handling Heavy Building Blocks"
- HSE Construction Information Sheet No 57 "Handling Kerbs: Reducing the Risks of Musculoskeletal Disorders"
- HSE Construction Information Sheet No 36 "Silica"
- HSE Construction Information Sheet No 54 "Dust Control on Concrete Cutting Saws Used in the Construction Industry"

IMPORTANT NOTES

The purpose of this datasheet is to provide Health, Safety and Environmental guidance on the safe handling, use and disposal of precast concrete products supplied by subsidiary or affiliate companies of CEMEX in the United Kingdom.

The information contained in this datasheet is correct at the date of, and applies only in relation to, the supply of material referred to in the delivery docket to which this datasheet is attached and forms part.

This datasheet should alert purchasers and/or users to the usual hazards in handling the supplied material when using it within the ordinary range of uses for which such material is normally supplied. If you have purchased or arranged the supply on behalf of a third party who will work with the material supplied it is your duty to pass this information on to them BEFORE such work commences.

For the avoidance of doubt the datasheet DOES NOT constitute the user's own assessment of workplace risk as may be required by other safety legislation and nothing herein shall be construed or relied upon as relieving the purchaser, user or any intermediate supplier or third party from any statutory or other legal duty which may apply to them or from taking care or precautions to protect themselves or others to whom they owe a duty of care.

The datasheet should not be relied upon for any other purpose including without limitation any technical or design purpose, nor relied upon in the use or handling of any other product whether supplied by CEMEX or not. Reliance placed on any part or all of the information contained in this datasheet which goes beyond the purpose set out above is entirely at the user's own risk.

Without limiting or restricting the terms and conditions upon which the material has been supplied by CEMEX, to the extent permitted by law, disclaims all liability arising directly or indirectly from the content or preparation of this datasheet except that CEMEX will accept responsibility for personal injury which is demonstrated to have been caused by its own negligence.