

Material Safety Data Sheet

Concrete Block.

1. Identification of substance/ Preparation and Company

- Company:** Leiths (Scotland) Ltd. **Telephone:** 01224 876 333
Rigifa,
Cove,
Aberdeen, AB12 3LR.
- Products:** Concrete Block
- Intended Use:** Various applications in construction and civil engineering projects, examples are major components of buildings.
- Background:** Blocks are one of the fundamental materials used in the construction industry.

Hazard Information

2. Composition

Blocks: Sand, aggregate, cementitious material, pigments, admixtures and water are combined and processed to form dense concrete products.

3. Hazards Identification

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.

- Eyes:** May cause mild irritation.
- Skin:** Not known to affect the skin. Good hygiene is advised however.
- Ingestion:** Not deemed to be a Hazard.
- Inhalation:** In excessive quantities respirable dust containing quartz may cause long-term damage to lungs.

Hazardous ingredients:

CLP Classification Crystalline Silica* CAS 238-878-4 Variable Xn R48/20 H372

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 (Crystalline Silica SiO ₂)	W.E.L. 0.1mg/m ³	8 Hrs T.W.A.

Exposure Control Limits / Source W.E.L. = Workplace Exposure Limit T.W.A. = Time Weighted Average

Emergency Action

4. First Aid Measures

When cutting – refer to the COSHH assessment for the task

When using solid blocks the following apply:

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

None Needed: Materials do not support combustion

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.

Environmental Measures

Handled in such a manner to minimise the generation of and maximise the containment of respirable dust.

Method of Cleaning

Using water in order to suppress dust.

Precautions

6. 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 2 high, however 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.

7. Exposure Controls / Personal Protection

Operatives working within certain areas of block production are to wear face masks to prevent the inhalation of dust and goggles to prevent dust entering the eye.

Product Information

8. 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

9. Stability and Reactivity

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.

10. 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

11. Ecological Information

No data are available on the blocks themselves. When used as intended, no environmental impact is anticipated.

Waste Disposal

12. Disposal Considerations

Not hazardous. However, disposal subject to local authority current requirements/regulations.

Additional Information

13. Transport Information

Not Hazardous. No vehicle labelling required.

14. Regulatory Information

Chemicals (Hazard Information and Packaging for Supply) Regulations 2002

Risk Phrases: R36/37 – Irritating to eyes and respiratory system. R48/20 – Harmful: danger of serious damage to health by prolonged exposure through inhalation (if respirable silica is present).

Safety Phrases: S36/ 37/ 39 – Wear suitable protective clothing, gloves and eye/face protection. EC1272/2008 Hazard Statements: H317 – May cause skin irritation H335 – May cause respiratory irritation H372 – Causes damage to organs through prolonged or repeated exposure (relates possible lung damage if exposed to respirable silica). Precautionary Statements: P261 – Avoid breathing dust P281 – Use personal protective equipment as required.

Other Statutory provisions:

- ❖ Health and Safety at Work etc. Act 1974
- ❖ Consumer Protection Act 2007
- ❖ Control of Substances Hazardous to Health (COSHH) 2002
- ❖ Construction (Design and Management) Regulations 2015
- ❖ Environmental Protection Act 1990

Important Notes

The information contained in this Safety Data Sheet does NOT constitute the user's own assessment of workplace risk as required by other safety legislation. If purchasing on behalf of a third party who will work with this material, it is your statutory duty to pass this on to them before such work begins.

15. Other information

Data and advice in this Safety Data Sheet is provided to alert all purchasers and users to the possible hazards of use when the material is used as intended. This information should enable them to take necessary precautions to protect the health and safety of all personnel.

Guidance References:

Available from HMSO, HSE area offices or local authority Environmental Health Departments:

- ❖ A step by step guide to COSHH (HS(G)97)

Further Copies of Safety Data Sheet

Available from local sales offices or:

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