

MATERIAL SAFETY DATA SHEET

Product: Ready-mixed Concrete

Issue date: October 2015 Issue No: 1

Substance/Preparation

Substance Name: Ready-mixed Concrete

Company/Undertaking

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Composition/Ingredients

Ready-mixed concrete is a mixture of:

- A cementitious material. (This may be cement or a mixture of cement with pulverised fuel ash or ground granulated blast furnace slag or silica fume);
- Fine and coarse aggregate
- Water:
- Admixtures or additives may be added to improve the properties of the fresh or hardened concrete. Pigments may be added to colour the product.

The components vary in concentration according to the required properties of the product.

The resultant mixture is abrasive and alkaline.

First Aid Measures

Summary of First Aid Procedures

In all cases of doubt, or where symptoms persist, medical advice should be obtained.

Inhalation

Not applicable.

Skin Contact

Where skin contact occurs with wet concrete, either directly or through saturated clothing, the concrete must be washed off immediately with soap and water. Where concrete enters boots or gloves or saturates clothing, the article should be removed immediately and washed before further use.

Eve Contact

Immediately and thoroughly irrigate with water.

Ingestion

Wash out mouth and drink plenty of water. Do not induce vomiting. Seek medical advice if a large amount is swallowed.

Fire Fighting Measures

<u>Suitable Extinguishing Media</u> Not applicable.

<u>Unsuitable Extinguishing Media</u> Not applicable.

Special Exposure Hazards in Fire None.

Special Protective Equipment for Fire Fighters None.

Hazards Identification

Ckin

Contact with wet cement mixes such as wet concrete can cause skin disease.

Irritant contact dermatitis is caused by the combination of the wetness, alkalinity and abrasiveness of the ready-mixed concrete.

Accidental Release Measures

Personal Precautions

No special requirements

Environmental Precautions

Entry into watercourses should be avoided.

Methods for Cleaning

No special requirements.



Allergic contact dermatitis may be caused by individual sensitivity to chromium compounds which may occur in cement.

Cement burns, a form of skin ulceration, may result from contact with freshly mixed concrete.

Eves

Wet material can cause irritation, inflammation or burns on contact with eyes.

Ingestion

The swallowing of small amounts of fresh concrete is unlikely to cause any significant reaction. Larger amounts can cause irritation of the stomach and intestines.

Handling/Storage

<u>Handling</u>

Skin contact should be avoided. The mixture is abrasive and highly alkaline.

Storage

The hardening process of ready-mixed concrete can be delayed by the addition of additives and or mixtures, extending the period during which the precautions given in this data sheet should continue to be taken and during which access by unauthorised persons should be prevented.

Physical and Chemical Properties

Appearance Grey, granular paste
Odour None

РΗ Highly Alkaline Boiling Point/Range Not Determined Melting Point/Range Not Determined Flash Point (0c) Not Applicable Flammability Not Applicable Auto Flammability Not Applicable **Explosive Properties** Not Applicable Oxidising Properties Not Applicable Vapour Pressure Not Applicable Relative Density Above 2.0

Water Solubility Dependent on rock type

Fat Solubility Not Determined

Exposure Controls

Take Measures to Prevent

Direct skin contact with fresh concrete should be avoided. It is also important not to kneel or sit on the material as harmful contact can occur through saturated clothing.

The surface treatment and cutting or hardened concrete can create dust which may contain quartz. If inhaled in excessive quantities over an extended period, respirable dust containing quartz can constitute a long term health hazard.

Workplace Exposure Limits Total Dust: 10 mg/m3 (8hrs T.W.A)

Respirable Dust: 4mg/m3 (8hrs T.W.A) Respirable Quartz: 0.1mg/m3 (8hrsT.W.A)

(Crystalline Silica Si02)

Stability and Reactivity

Conditions to avoid

None.

Materials to avoid

None.

Hazardous Decomposition Products

None

T.W.A= Time Weighted Average

Personal Protection

Respiratory Protection

Suitable respiratory protective equipment

Hand Protection Impervious gloves

Toxicological Information

Skin contact could result in dermatitis and skin burns or disease. Inhalation or respirable dust from the working of hardened concrete may cause permanent lung damage.



Skin Protection

Long sleeved clothing, full length trousers and impervious boots

Eve Protection

Goggles may be required

Ecological Information

Possible Effects

None.

Behaviour

Disposal

Non Hazardous.

Environmental Assessment

When used and disposed of as intended, no adverse environmental effects are foreseen.

None.

Transport Information

Special Carriage Requirements

Likely Residues/Waste Product

Alkaline slurry. Inert hardened material.

Safe Handling of Residues/Waste Product

Aggregates are inert but should be disposed of in accordance with local and national legal requirements.

See the Environmental Protection Act 1990 'Duty of care' and other current legislation.

Other Information

Training Advice Wear and use of PPE

Further Information

Head of Safety, Health and Environment Breedon Southern Limited Telephone (01332) 694010

Key data used to compile data sheet HSE Guidance Note EH40/2011 PPE Regulations 1992 COSHH Regulations 2002 (sixth edition) 2013 Environment Protection Act 1990

Further copies of this Safety Data Sheet may be obtained from either Breedon Southern Limited or Breedon Northern Limited.

Regulatory Information

This product is NOT classified as dangerous for transport.

Legal Notice

HSE Crystalline Silica EH59

The information in this Safety Data Sheet was believed to be correct at the time of issue. However, no warranty is made or implied as to the accuracy or completeness of this information.

If you have purchased this product for supply to a third party for use at work, it is your duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet.

If you are an employer, it is your duty to tell your employees and others who may be affected of any hazards described in this sheet and any of the precautions which should be taken.

This Safety Data Sheet does not constitute the user's own assessment of workplace risk, and it is the user's sole responsibility to take all necessary precautions when using this product.