

SAFETY DATA SHEET

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1 Identification of Substance & Company

READY-MIXED CONCRETE

Company

Tarmac Limited
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2 Composition / Information on 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 blastfurnace 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.

3 Hazards Identification

Skin

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.

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.

Eyes

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.

4 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.

Eye 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.

5 Fire Fighting Measures

Suitable Extinguishing Media

Not applicable.

Unsuitable Extinguishing Media

Not applicable.

Special Exposure Hazards in Fire

None.

Special Protective Equipment for Fire Fighters

None.

6 Accidental Release Measures

Personal Precautions

No special requirements.

Environmental Precautions

Entry into watercourses should be avoided.

Methods for Cleaning

No special requirements.

7 Handling and Storage

Handling

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 admixtures, 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.

8 Exposure Controls / Personal Protection**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 of 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.

Exposure Control Limits / Source

Total Dust: O.E.S. 10mg/m³
8 Hours T.W.A.

Respirable Dust: O.E.S. 4mg/m³
8 Hours T.W.A.

Respirable Quartz: M.E.L. 0.3mg/m³
Crystalline Silica SiO₂ 8 Hours T.W.A.

O.E.S. = Occupational Exposure Standard

M.E.L. = Maximum Exposure Limited

T.W.A. = Time Weighted Average

Respiratory Protection

Suitable respiratory protective equipment.

Hand Protection

Impervious gloves

Skin Protection

Long sleeved clothing, full length trousers and impervious boots.

Eye Protection

Goggles may be required.

9 Physical and Chemical Properties

Appearance	Grey, granular paste
Odour	None
pH	Highly alkaline
Boiling Point / Range	Not determined
Melting point / Range	Not determined
Flash Point (°C)	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

10 Stability and Reactivity**Conditions to Avoid**

None.

Materials to Avoid

None.

Hazardous Decomposition Products

None.

11 Toxicological Information

Skin contact could result in dermatitis and skin burns or disease.

Inhalation of respirable dust from the working of hardened concrete may cause permanent lung damage.

12 Ecological Information**Possible Effects**

None.

Behaviour

Non Hazardous.

Environmental Assessment

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

13 Disposal Consideration**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.

14 Transport Information**Special Carriage Requirements**

None.

15 Regulatory Information

This product is NOT classified as dangerous for transport.

16 Other Information**Training Advice**

Wear and use of PPE

Recommended Uses and Applications

Industrial and construction applications.

Further Information

The Safety, Health & Environmental Manager

Tarmac Limited

Telephone: (01902) 353522

Key Data Used to Compile Data Sheet

HSE Guidance Note EH40/2000

PPE Regulations 1992

COSHH Regulations 1999

Environmental Protection Act 1990

HSE Crystalline Silica EH59

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.

Further copies of this Safety Data Sheet may be obtained from Tarmac Limited.