

# THE CONCRETE COMPANY

## Health and Safety Data Sheet

### COMPANY

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The Concrete Company  
Station Road  
Thorney  
Nr. Peterborough  
Cambridgeshire  
PE6 0QE

### COMPOSITION

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Mixture of natural aggregates, cement and water. Other ingredients may include admixtures, Ground Granulated Blast-Furnace Slag (GGBS). Such additions are made to alter/improve the working characteristics of the material or to affect/enhance its hardened properties.

The resultant mixture is abrasive and alkaline.

### HAZARDS IDENTIFICATION

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#### Wet Concrete

Contact with wet concrete can cause:

- Irritant contact dermatitis. Caused by the combination of the wetness, alkalinity and abrasiveness of the concrete.
- Allergic contact dermatitis. 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.

#### Dry Concrete Dust

Inhalation of silica particles in dust created by cutting or surface treatment of hardened concrete containing high silica aggregates (e.g. flint, quartzite, granite) may cause respiratory damage.

### FIRST AID MEASURES

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#### Wet Concrete

**Eye Contact:** Immediately irrigate with clean water for at least 10 minutes. Seek medical attention.

**Inhalation:** Remove patient to fresh air.

**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, gloves or saturates clothing, the article should be removed immediately and washed before further use.

**Ingestion:** **DO NOT INDUCE VOMITING!** Wash out mouth and drink plenty of water. Seek medical attention if large amounts are swallowed.

## **FIRE FIGHTING MEASURES**

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None needed: Material does not support combustion

## **ACCIDENTAL RELEASE MEASURES**

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### **Personal protection**

Avoid skin and eye contact. Wear protective clothing.

### **Environmental measures**

Avoid entering drains, sewers or water courses.

### **Methods of cleaning**

Recover bulk spillage as quickly as possible in the wet or semi-dry state using a suction system or mechanical shovel.

## **HANDLING AND STORAGE**

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### **Wet Concrete**

Avoid skin and eye contact. The mixture is abrasive and highly alkaline.

### **Concrete dust**

Cutting and surface treatment of hardened concrete should be worked to minimise the creation of airborne dust. Engineering control measures such as containment and local exhaust ventilation should be applied when airborne dust exposure levels are approached.

## **EXPOSURE CONTROLS / PERSONAL PROTECTION**

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### **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/m <sup>3</sup>
	8 Hours T.W.A.	
Respirable Dust:	O.E.S	4mg/m <sup>3</sup>
	8 Hours T.W.A.	
Respirable Quartz: Crystalline Silica SiO <sub>2</sub>	M.E.L.	0.3mg/m <sup>3</sup>
	8 Hours T.W.A.	

O.E.S.	Occupational Exposure Standard
M.E.L.	Maximum Exposure Level
T.W.A.	Time Weighted Average

## **exposure controls / personal protection cont.**

### **Concrete dust protection**

Respiratory protection:	Suitable respiratory protective equipment to HSE approved standard.
Hand protection:	Abrasive resistant gloves.
Eye protection:	To HSE approved standard for dust goggles.
Skin protection:	Overalls.

### **Wet concrete personal protection**

Hand protection:	Impervious gloves.
Eye protection:	Goggles to HSE approved standard.
Skin protection:	Long sleeved clothing, full length trousers and impervious boots.

## **PHYSICAL AND CHEMICAL PROPERTIES**

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A mixture of aggregate, cementitious materials and water.

Abrasive and Alkaline typically **pH10-14**

## **STABILITY AND REACTIVITY**

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**Not applicable**

## **TOXICOLOGICAL INFORMATION**

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### **Wet Concrete**

Eye contact:	May cause irritation or in severe cases, alkali burns.
Skin contact:	Short term exposure may cause alkali burns; may cause acute allergic dermatitis in people sensitised to chromium compounds.  Long term exposure may cause irritant contact dermatitis; may lead to sensitisation of the skin to chromium compounds.

### **Dry Concrete Dust**

Eye contact:	May cause transient irritation.
Skin contact:	Unlikely to cause harm on brief or occasional contact.
Inhalation:	Inhalation of large quantities of respirable silica may lead to progressive lung damage. This may cause permanent disability and in extreme cases, may be fatal.
Ingestion:	No harm likely.
Chronic:	Exposure to high levels of silica may cause silicosis.

## **ECOLOGICAL INFORMATION**

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### **Environmental Assessment**

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

## **DISPOSAL CONSIDERATIONS**

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

## **TRANSPORT INFORMATION**

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Not hazardous: no vehicle labelling required.

## **REGULATORY INFORMATION**

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### **Statutory provisions**

Health and Safety at Work, Act 1974  
Consumer Protection Act 1987  
Environmental Protection Act 1990  
Control of Substances Hazardous to Health Regulations (COSHH) 1994

### **Guidance notes**

Occupational Exposure Limits (EH40)  
Local Exhaust Ventilation (HS(G)37)  
Crystalline Silica (EH59)  
Control of Respirable Silica in Quarries (HS(G)73)  
Dust, General Principles of Protection (EH44)  
Waste Management - The Duty of Care

The above publications are available from HMSO or HSE

## **OTHER INFORMATION**

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### **Important notes**

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

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 of any precautions which should be taken.

Further copies of this data sheet may be obtained from your local representative or office.