

COSHH 004

CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH REGULATIONS 2002 (Amend)

**C.O.S.H.H. ASSESSMENT SHEET**

**DEPARTMENT/LOCATION:**

Contracting & Workshop Locations

**SUBSTANCE:** Ready Mixed Concrete

**RISK PHRASES:**  
**SAFETY PHRASES:**

**SUBSTANCE HAZARDS**



| HARMFUL/IRRITANT                    | DANGER TO HUMAN HEALTH              | ENVIRO-HAZARD            | CORROSIVE                | FIRE                     | OXIDISING                | TOXIC                    |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**HAZARDOUS INGREDIENTS:**

**WEL (Workplace Exposure Limit)**

Total Dust: WEL 10mg/m<sup>3</sup>

Respirable Dust: WEL 4mg/m<sup>3</sup>

Respirable Quartz: WEL 0.1mg/m<sup>3</sup>

**TASK OR PROCESS DESCRIPTION:**

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 & course 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.

**QUANTITY USED:**

Various

**ROUTE OF CONTACT:**

|                   |                                     |                  |                                     |                   |                          |                  |                          |                     |                                     |
|-------------------|-------------------------------------|------------------|-------------------------------------|-------------------|--------------------------|------------------|--------------------------|---------------------|-------------------------------------|
| <b>INHALATION</b> | <input checked="" type="checkbox"/> | <b>INGESTION</b> | <input checked="" type="checkbox"/> | <b>ABSORPTION</b> | <input type="checkbox"/> | <b>INJECTION</b> | <input type="checkbox"/> | <b>SKIN CONTACT</b> | <input checked="" type="checkbox"/> |
|-------------------|-------------------------------------|------------------|-------------------------------------|-------------------|--------------------------|------------------|--------------------------|---------------------|-------------------------------------|

**EFFECTS OF EXPOSURE:**

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

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

Irritant contact dermatitis is caused by a combination of the wetness, alkalinity & 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 fresh mixed concrete.

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

**PERSONS EXPOSED :**

Contracting Operatives, Quarry Operatives & Workshop & Mobile Fitters.

**EXISTING CONTROL MEASURES :**

Wash hands before breaks & at end of work.

Keep away from food & drink.



GLOVES



SAFETY BOOTS



COVERALLS



APRON



BREATHING APPARATUS



FULL FACE MASK



FACE MASK



GOGGLES



Suitable respiratory protective equipment.  
 Impervious gloves.  
 Long sleeved clothing, full length trousers & impervious boots.  
 Goggles may be required.

**MONITORING OF EXPOSURE :**

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 & cutting of hardened concrete 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.

**HEALTH SURVEILLANCE :**

No.

**INFORMATION INSTRUCTION AND TRAINING :**

Wear & use correct PPE.

**STORAGE**

The hardening process of ready mix concrete can be delayed by the addition of additives and/or admixtures, extending the period in which the precautions given should continue to be taken and during which unauthorised access should be prevented.

**DISPOSAL**

Disposal to suitable waste disposal site in accordance with local Waste Disposal Authority.

**SPILLAGE CONTROLS**

Entry into water courses should be avoided.

**CONCLUSION OF RISKS AND ADEQUACY OF EXISTING CONTROLS:**

Exposure adequately controlled whilst control measures followed.

**RECOMMENDATIONS OF IMPROVEMENTS:**

None

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**DATE:** Aug 2017

**REVIEWED BY:** Scott McDonald

**DATE:** Aug 2017