



McGRATH'S Quarry Group

Material Safety Data Sheet - Ready Mixed Concrete

1. (a) **Identification of Product**

Ready Mixed Concrete.

(b) **Name of Company**

Cong Concrete Products Ltd.

(c) **Application**

Use of Ready Mixed Concrete should be in accordance with the relevant National/European codes of practice.

2. **Composition of Ingredients**

Ready Mixed Concrete is a mixture of natural aggregates, cement and water. Admixtures may be added to modify the properties of the finished product.

3. **Hazard Identification**

(a) **Fresh Concrete**

Fresh concrete contains cement and water with the result that an alkaline solution is produced.

Repeated skin contact with fresh concrete over a period may cause skin irritation.

The abrasiveness of the constituents can aggravate the effect. Some skins are more sensitive to cement and admixtures, which may be present and can develop allergic contact dermatitis; however this is rare. Prolonged skin contact with fresh concrete and admixtures can result in cement burns.

Fresh ready-mixed concrete exerts pressure both horizontally and vertically. Movement/collapse of formwork/shuttering etc. is therefore possible if such formwork/shuttering etc. and any falsework or ancillary equipment associated with it, is not properly designed and erected.

Fresh concrete that is not stiff in consistency can support very little weight. A submersion of persons in deep sections of fresh concrete is therefore possible.

(b) **Hardened Concrete**

Cutting, drilling or hammering of hardened concrete can create dust. If inhaled in excessive quantities over extended periods, respirable dust can constitute a long-term hazard.

Cutting, drilling or hammering of hardened concrete, unless adequately controlled, can project particles at high velocity with consequent risk of impact damage and /or injury particularly to exposed areas of the body and eyes.

4. **FirstAid Measures**



First Aid treatment is as follows:

4.1 **Eye Contact (Fresh Concrete)**

Immediately rinse under running water for at least TEN minutes and seek medical advice.

4.2 **Skin Contact (Fresh Concrete)**

Immediately rinse affected areas under running water for at least TEN minutes.

4.3 **Cuts/Abrasions**

Cuts, abrasions from hardened concrete, should be cleaned and treated using the normal First-Aid method. Wounds must receive prompt medical attention. In all cases of doubt or where symptoms persist medical advice must be obtained.

5. **Fire Fighting Measures**

Not applicable.

6. **Accidental Release Measures**

6.1 Avoid contact with skin.

6.2 Prevent entry of the wet concrete into watercourses, drains or other areas where hardened materials cause problems.

6.3 Remove product using appropriate equipment.

7. **Handling**

7.1 Avoid contact with eyes & skin.

7.2 Before lifting always size up the load. Always follow safe lifting and manual handling procedures.

7.3 Ensure that all formwork/shuttering etc. and any falsework or ancillary equipment associated with it, is properly designed and erected to safely withstand the pressures exerted on it by fresh ready mixed concrete.

Ensure that unauthorized access to deep sections of fresh concrete that is not stiff in consistency is prohibited.

8. **Exposure Controls/Personal Protection**

8.1 **Hand Protection**

Wear suitable protective gloves

8.2 **Skin Protection**

Avoid contact with skin. Overalls should be worn

8.3 **Eye Protection**

Wear eye protection to approved standards to prevent eye contact from splashing of fresh concrete or flying particles when hammering hardened concrete

8.4 **Masks**

Wear appropriate respiratory protection when cutting, drilling or hammering hardened concrete.

8.5 **Footwear**

Wear knee high rubber boots or similar with protective toecaps.

8.6 **Kneepads**

Wear kneepads when kneeling on fresh concrete.

9. **Physical & Chemical Properties**

Density is typically 2.4 tons per cubic meter. PH level of fresh concrete is typically 12. Fresh concrete is usually grey in color and earth-moist to free flowing in form. Ready Mixed Concrete hardens through a chemical reaction between cement and water. The product is abrasive.

10. **Stability & Reactivity**

Not applicable.

11. **Toxicological information**

No risk on observance of safety instructions at 6, 7 & 8 above.

12. **Ecological information**

Fresh concrete may result in change in pH level and may influence aquatic life forms. Hardened concrete has no ecological effects.

13. **Disposal Considerations**

Hardened concrete may be recycled or placed in approved licensed landfill site.

14. **Transport Information**

No risk on observance of safety instructions at 6, 7 & 8 above.

15. **Regulatory Information**

Not applicable.

16. **Other Information**

Recommendation, Uses and Restrictions

Mortars, Renders and Screeds must be adequately cured before structural loads are imposed.

Issued January 2006

