# Readymixed Concrete Health and Safety Data Sheet

# COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures of aggregates, cement and water. Other ingredients may include Ground Granulated Blast furnace slag (GGBS), Pulverised Fuel Ash (PFA) and admixtures. Such additions are made to alter/improve the properties of the concrete in the plastic or hardened state.

#### HAZARDS IDENTIFICATION

#### Wet Concrete

Contact with eyes may cause severe irritation and/or alkali burns.

Skin contact may result in irritant contact dermatitis and/or ulceration due to the combination of wetness, alkalinity and abrasiveness of the cement mixture.

Allergic Contact Dermatitis may be caused by individual sensitivity to chromium compounds, which occur in cement.

#### **Dry Concrete**

Inhalation of silica particles in dust caused by cutting/surface treatment of hardened concrete may cause respiratory damage.

#### FIRST AID MEASURES

#### **Wet Concrete**

Eye Contact: Irrigate eyes immediately with clean water for at least 10 minutes. Seek immediate medical attention.

Skin Contact: Wash thoroughly with clean water as soon as contamination occurs. Note: This includes contact through contaminated clothing.

## Dry Concrete

Eye Contact: Irrigate eyes immediately with clean water. Seek medical attention.

Skin Contact: Wash thoroughly with clean water.

Ingestion: Drink plenty of water and seek medical attention.

FIRE FIGHTING MEASURES

No fire or explosive hazard.

## ACCIDENTAL RELEASE MEASURES

Personal Protection: Avoid contact with skin or eyes. Wear impervious protective clothing.

Environmental Measures: Prevent from entering watercourses, drains or sewers.

Method of Cleaning: Any spillage should be recovered immediately while material is still plastic and area washed thoroughly if applicable.

#### HANDLING AND STORAGE

#### **Wet Concrete**

Avoid direct skin and eye contact. Do not sit/kneel on wet concrete.

#### **Dry Concrete**

Minimise creation of dust wherever possible.

EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Wet Concrete**

Hand Protection: Wear suitable impervious gloves.

Eye Protection: Suitable eye protection is strongly recommended where there is a risk of accidental splashing.

Skin Protection: Long sleeved clothing, full-length. Wear trousers and impervious safety boots. Do not allow wet cement under clothing.

#### **Dry Concrete**

Occupational Exposure Standards (OES), or Maximum Exposure Limits (MEL), for inhalants and respirable dusts are set by the Health & Safety Commission.

These are published annually in HSE Guidance Note EH40. The following limits (8 hour time weighted averages) are given in EH40/99.

Total Inhalable Dust 10mg/m3 OES

Respirable Dust 4 mg/m3 OES

Respirable Crystalline Silica 0.3mg/m3 MEL.

Engineering Control Measures: Containment and local exhaust ventilation where airborn dust is likely to reach exposure limits.

Respiratory Protection: Suitable respiratory protective equipment to HSE approved standard if engineering control measures are insufficient.

Hand Protection: Abrasive resistant gloves.

Eye Protection: Goggles to approved HSE Standard.

## PHYSICAL and CHEMICAL PROPERTIES

Detailed properties vary according to specific mix however, all concretes are:

- Abrasive
- Alkaline (typically pH value 10 14).

# STABILITY ANI) REACTIVITY

No safety issues relating to stability and reactivity of product under normal conditions.



#### TOXICOLOGICAL INFORMATION

#### Wet Concrete

Eye Contact: May cause irritation or alkali burns.

Skin Contact: May cause alkali burns and acute allergic dermatitis in people sensitised to chromium compounds. Long term exposure may cause irritant contact dermatitis, which can lead to sensitisation of the skin to chromium compounds.

#### **Dry Concrete**

Eye Contact: May cause transient irritation.

Skin Contact: No harm likely.

Inhalation: Inhalation of large quantities of dust may cause lung damage and in extreme cases may lead to premature death. Ingestion: No harm likely.

## ECOLOGICAL INFORMATION

When used as intended no environmental impact is anticipated.

Do not allow material to enter watercourses, drains or sewers.

# DISPOSAL CONSIDERATIONS

Non-hazardous. Disposal subject to Local Authority requirements and regulations.

# TRANSPORT INFORMATION

Special Carriage Precautions: Nil. No vehicle labelling required.

## REGULATORY INFORMATION

Chemicals (Hazard Information and Packaging for Supply) Regulations 1997. Danger Classification: Irritant (+hazard symbol) R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

S24 Avoid contact with skin.

S25 Avoid contact with eyes.

S26 If contact with eyes rinse immediately with clean water and seek medical advice.

Statutory - Health & Safety at Work Act 1974 -Consumer Protection Act 1987 - Environmental Protection Act 1990 - P.P.E Regulations 1992 -COSHH Regulations 1994

# LEGAL NOTICE

The information contained in this Safety Data Sheet was considered the best available at the date of issue. However, no warranty is made or implied that the information is accurate or complete. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.