Ready Mixed Concrete and Screed

According to Regulation (EC) No 1907/2006, Annex II, as amended.

Glendinning
QUARRY & CONCRETE PRODUCTS

Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Product name: Ready mix concrete and screed(speed screed and XTR).

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses
Ready mix concrete is widely used as a structural component in construction applications.

Uses Advised Against

No specific uses advised against are identified.

1.3 Details of the supplier of the safety data sheet

E & JW Glendinning Limited
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Ashburton
Newton Abbot
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1.4 Document

SDS no DQ 11 Issue 07/2017

1.5 Contact Person

Product Safety department
01364 652601 ext 1255

1.6 Email

sales@ejwglendinning.co.uk

Section 2: Composition/ Information on Ingredients

2.1 Calcium carbonate

- Substance with National workplace exposure limits.
- Classification
  Not classified

2.2 Cement, Portland, Chemicals

Classification
- Skin Irrit. 2 – H315
- Eye Dam. 1 – H318
- Skin Sens. 1 – H317
- STOT SE 3 – H335

2.3 Cement, Alumina, Chemicals

Classification
Eye Irrit. 2 – H319

2.4 Calcium Dihydroxide

Classification
- Skin Irrit. 2 – H315
- Eye Dam. 1 – H318
- STOT SE 3 – H335

2.5 Crystalline Silica

Classification
- STOT RE 1 – H372

2.6 Calcium dihydroxide

Classification
- Skin Irrit. 2 – H315
- Eye Dam. 1 – H318
- STOT SE 3 – H335

Section 3: Hazard Identification

3.1 Classification of Substance or Mixture

The product has been classified and labelled as hazardous according to regulation (EU) 1272/2008 (CLP).

3.2 Hazards: Serious Eye Damage

Concrete may cause immediate or delayed irritation or inflammation. Eye contact with wet cement can cause moderate irritation, inflammation, chemical burns or blindness. Eye exposures may require immediate first aid and medical attention to prevent acute damage to the eyes.

3.3 Hazards: Skin Contact

Concrete may cause dry skin, irritation, dermatitis, discomfort and severe burns. Exposure of sufficient duration to wet concrete can cause serious, potential irreversible damage eye, skin, respiratory and digestive tracts due to chemical burns caused by caustic, including third degree burns. Skin exposure may be hazardous even if there is no pain or discomfort.

Irritant dermatitis is caused by the physical properties of concrete including alkalinity and abrasion.

Unhardened concrete is capable of causing dermatitis by irritation and allergy. Skin affected by dermatitis can include symptoms such as, redness, itching, rash, scaling and cracking.

Allergic contact dermatitis is caused by sensitization to hexavalent chromium (chromate) present in concrete. The reaction can range from a mild rash to severe ulcers to the skin. Persons already sensitized may react to the first contact with wet concrete or unhardened concrete. Others may develop allergic dermatitis after years of repeated contact with wet concrete.

3.4 Hazards: Inhalation

(Acute)

Breathing dust may cause nose, throat, lung or mucous membrane irritation, including choking, depending on the level of exposure. Inhalation of high levels of dust can cause chemical burns to the nose, throat and lungs.

(Chronic)

Risk of injury depends on the level of exposure and duration.

This product contains crystalline silica. Repeated or prolonged inhalation of respirable crystalline silica from this product can cause silicosis, a seriously disabling and fatal lung disease.
See section 4 for more information.

Concrete is not listed as a carcinogen by LARC or NTP; however, concrete contains trace amounts of crystalline silica and hexavalent chromium which is classified by IARC and NTP as known carcinogens.

Some studies show that exposure to respirable crystalline silica (without Silicosis) or that the disease silicosis may be associated with the increased incidence of several autoimmune disorders such as scleroderma (thickening of the skin), systemic lupus erythematosus, rheumatoid arthritis and diseases affecting the kidneys. Silicosis increases the risk of Tuberculosis.

3.5 Ingestion

Do not ingest concrete. Ingestion of small amounts is not known to be harmful, large quantities can cause chemical burns to the mouth, throat, stomach and digestive tract.

3.6 Medical Conditions Aggravated By Exposure

Individuals with lung diseases e.g. bronchitis, emphysema, COPD, pulmonary diseases or sensitivity to hexavent chromium can be aggravated by exposure.

Section 4: First Aid Measures

4.1 Ingestion

Do not induce vomiting. If the person is conscious have the person drink plenty of water. Seek medical attention or contact the poisons centre immediately.

4.2 Inhalation

Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

4.3 Skin Contact

Wash with cool water and a PH neutral soap or mild skin detergent. Seek medical advice for rash, irritation, burns, dermatitis and prolonged unprotected exposures to wet concrete.

4.4 Eye Contact

Rinse eyes thoroughly with water for at least 15 minutes, including under the eye lids, to remove all particles. Seek medical attention for abrasions and burns.

Section 5: Firefighting Measures

5.1 Flashpoint and Method

Non-combustible.

5.2 General Hazard

Wet concrete is caustic and avoid breathing dust.

5.3 Extinguishing Media

Not applicable

5.4 Firefighting Equipment

Not applicable

Section 6: Accidental Release Measures

6.1 General

Avoid contact with skin. Place spilled material into a container. Wear appropriate protective equipment as advised in section 8. Allow material to solidify before disposal. Do not wash concrete down drainage or sewage systems or into other bodies of water (e.g. rivers and streams)

6.2 Disposal

Dispose of concrete according to local regulations.

Section 7: Handling and Storage

7.1 Usage

Crushing, grinding or cutting hardened cement, concrete or other crystalline silica bearing material will release respirable crystalline silica. Use all appropriate measures of dust control, suppression and PPE as described in section 8.

7.2 Storage Pressure

Unlimited

7.3 Storage Temperature

Unlimited

7.4 Clothing

Remove and launder clothing that is contaminated with wet concrete. Thoroughly wash skin after exposure to wet concrete.

Section 8: Exposure Controls and Personal Protection

8.1 Personal Protective Equipment

Skin protection: wear gloves, boot covers and protective clothing impervious to water to prevent skin contact. Barrier creams are not to be relied on, in place of impervious gloves. Remove clothing and protective equipment that become saturated with wet cement or concrete and immediately wash exposed skin.

Eye protection: wear appropriate safety goggles or glasses rated for the task when handling wet concrete to prevent contact with eyes. The wearing of contact lenses is not recommended when using concrete.

Respiratory protection: Under normal conditions no respiratory protection is required. Wear approved HSE respirator that is properly fitted and in good condition when exposed to dust above the exposure limits.

8.2 Engineering Controls

Use local exhaust, general dilution ventilation, water suppression or other methods to maintain dust levels below exposure limits.

Section 9: Chemical and Physical Properties

9.1 Physical State

Semi-fluid, Flow able, granular paste. Slightly soluble in water (0.1 – 1.0 %)

9.2 Appearance

Variety of colours, usually grey.

9.3 Odour

None.

9.4 Vapour Pressure, Evaporation Rate and Vapour Density

N/A

9.5 Specific Gravity

1.9 to 2.4

9.6 pH in Water

12 – 13

9.7 Boiling Point and Freezing Point

N/A

9.8 Viscosity

Various.

Section 10: Stability and Reactivity

10.1 Stability

- Hardened concrete is stable. Avoid contact with incompatible materials.
- Section 10 continued.

10.2 Incompatibility

Wet concrete is alkaline and is incompatible with aluminium metal, ammonium salts and acids, Cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Cement reacts with water to form silicates calcium hydroxide. Silicates react with powerful oxidisers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride.

10.3 hazardous Decomposition and Hazardous Polymerization

None.

Section 11: Toxicological

Information on Toxicological Effects

11.1 Acute Toxicity

- Wet concrete – Can cause serious alkali burns to skin and eyes.
- Set concrete – None.

11.2 Eye Damage

- Eye Dam. 1 – H318 Causes serious eye damage.
- Wet concrete – Can cause irritation, inflammation and serious burns that can lead to blindness.
- Set concrete – Long term contact with eyes can cause eye irritation and damage.

11.3 Skin Corrosion and Irritation

- Skin Irrit. 2 – H315 Causes skin irritation.
- Wet concrete – Long term contact may result in skin sensitisation, skin disease and dermatitis, due to the alkali nature of cement and/or presence of chromium.
- Dry concrete – Long term contact with skin may cause mechanical skin irritation and possible dermatitis.

11.4 Respiratory Sensitisation

- Wet concrete – None.
- Dry Concrete – Chronic exposure by inhalation of concrete dust may cause cough, breathlessness and lung fibrosis.

11.5 Specific Target Organ Toxicity

- STOT SE 3 – H335 May cause respiratory irritation.
- Repeated exposure Prolonged exposure of respirable crystalline silica fraction by inhalation may lead to silicosis in lungs.

11.6 Ingestion

- Wet concrete – In large quantities may causes irritation to the stomach and intestines.
- Dry concrete – Not likely to cause long term problems.

Section 12: Ecological

Environmental Assessment

12.1 When used and disposed of as intended

No adverse environmental effects are foreseen. However, material should be refrained from entering watercourses or drains as it can cause blockages.

12.2 Mobility

Set ready-mixed concrete materials are immobile.

12.3 Persistence And Degradability

Set ready-mixed concrete materials are resistant to degradation and will persist in the environment.

12.4 Eco Toxicity

Set concrete is not expected to be toxic to aquatic organisms. Fresh wet concrete may cause damage to fish and aquatic organisms due to increased pH levels. Do not allow to enter waterways.

12.5 Bio Accumulative Potential

Not applicable.

Results of PBT and vPvB assessment
Will not meet PBT or vPvB criteria.

Section 13: Disposal Considerations

13.1 Waste Treatment Methods

Product

- Set ready-mixed concrete is classified as an inert waste and can be disposed of as normal industrial waste in accordance with waste regulation.
- It is recommended that it be disposed of via recycling or reuse.
- The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

13.2 Wet Concrete

Wet concrete is hazardous waste and should be allowed to set before disposal.

13.3 Contaminated Packaging

Not applicable.

Section 14: Transport Information

14.1 General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. Un Number

Not applicable.

14.2. Un Proper Shipping Name

Not applicable.

14.3. Transport Hazard Classes

No transport warning sign required.

14.4. Packing Group

Not applicable.

Section 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/ Legislation Specific for the Substance or Mixture

15.1 National Regulations

EH40/ Workplace exposure limits.

15.2 EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.3 Restrictions (Title VIII Regulation 1907/2006)

Entry number: 47.

15.4. Chemical Safety Assessment

No chemical safety assessment has been carried out.

Section 16: Other Information

16.1 Classification Procedures According to Regulation (EC) 1272/2008

Skin Irrit. 2 – H315, Eye Dam. 1 – H318, Skin Sens. 1 – H317, STOT SE 3 – H335: Calculation method.

16.2 Training Advice

Read and follow manufacturer's recommendations. Revision comments.

16.3 SDS Number

DQ 11

16.4 Other Information

- HSE Guidance Note EH40/2007.
- PPE Regulations 1992.
- COSHH Regulations 2002.
- Environmental Protection Act 1990.
- HSE Crystalline Silica EH59.
- Dangerous Substances Directive (DSD) 67/548/EEC.
- Classification, Labelling and Packaging Regulations (CLP) EC1272/2008.

Hazard Statements In Full

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H372 Causes damage to organs through prolonged or repeated exposure if inhaled.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. This Material Safety Data Sheet does not constitute the user's own assessment of workplace risk, and it is the user's sole responsibility to take all necessary safety precautions when using this product. The receiver of our product is singularly responsible for adhering to existing laws and regulations and to carry out suitable assessment of risk prior to use, calling on all relevant information.

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