



Health and Safety Datasheet

Ready Mixed Concrete/ Concrete Blocks

Hazard Information

1 COMPOSITION

Northstone ready mixed concrete consists of a combination of aggregate, cement and water. Admixtures may be added to improve workability, water retention and set retardation and in the hardened state they impart improved bond strength. The resultant mix is abrasive and alkaline.

2 HAZARDS IDENTIFICATION

Wet concrete

Contact with wet concrete can cause skin diseases:-

- Allergic Contact Dermatitis is mainly caused by individual sensitivity to chromium compounds which may occur in cement.
- Irritant Contact Dermatitis is mainly caused by the combination of the wetness, alkalinity and abrasiveness of the cement mixture.
- Cement Burn, 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 and in particular silicosis.

Emergency Action

3 FIRST AID MEASURES

Wet concrete.

Eye contact: Irrigate eye(s) 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: Skin contact includes indirect contact through saturated clothing which should be changed.

Dry concrete dust

Eye contact: Irrigate eye(s) immediately with clean water. Seek medical attention

Skin contact: Wash with clean water.

Inhalation/ingestion: Remove patient to fresh air

Note: In all cases of doubt, or where symptoms persist, medical advice should be obtained.

4 FIRE FIGHTING MEASURES

None needed:

5 ACCIDENTAL RELEASE MEASURES

Personal protection

Avoid contact with skin and eyes

Wear impervious protective clothing Note: (see under section 7 EXPOSURE CONTROLS/PERSONAL PROTECTION)

Environmental measures

Prevent from entering drains, sewers or water courses.

Unused hardened concrete is inert but should be disposed of in accordance with legal requirements.

Method of cleaning

Recover bulk spillage, without delay and while material is still in non-hardened (plastic) state, using suction system or mechanical shovel

Precautions

6 HANDLING & STORAGE

Wet concrete

Protective clothing must be worn when handling wet concrete, particularly on the hands, arms, legs and feet.

The hardening of concrete can be delayed, during this extended period all necessary precautions as per this Data Sheet should continue to be taken.

The mechanical handling of the product on site, i.e. the use of concrete skips and pumps, should be in accordance with appropriate Risk Assessments and Method Statements on the use of lifting equipment and tackle of adequate capacity and using competent and experienced operators. The Company's drivers are not trained to handle concrete skips or give signals to crane or lifting plant operators and in the interests of health and safety it is preferable that they are not asked to do so.

Dry concrete dust

Minimise dust creation wherever possible

Note: For personal protection, also see section 7

7 EXPOSURE CONTROLS/PERSONAL PROTECTION

Wet concrete

Hand and arm protection: impervious gloves/gauntlets and long sleeved clothing

Eye protection: suitable protection is advisable where there is risk of accidental exposure/splashing.

Skin protection: long sleeved clothing, full-length trousers, and impervious boots. Also kneepads, if kneeling down to provide a surface finish.

Dry concrete dust

NOTE: Occupational Exposure Standards (OES) or Maximum Exposure Limits (MEL) for inhalable and respirable dusts are published annually in HSE Guidance Note EH40. The following limits (8 hour time-weighted averages) are given;

8 Hour TWA

Total inhalable dust: 10mg/cubic metre OES

Respirable dust: 4mg/cubic metre OES

Respirable crystalline silica: 0.1mg/cubic metre TWA

Engineering control measures: containment and local exhaust ventilation where airborne dust exposure 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: anti-dust goggles to approved HSE standard

Product Information

9 PHYSICAL & CHEMICAL PROPERTIES

Detailed properties vary according to:

The specific mix, and the ingredients added to affect the working characteristics of the material

All mixes are:

Abrasive Alkaline (typically pH10-14)

10 STABILITY & REACTIVITY

Not applicable

11 TOXICOLOGICAL INFORMATION

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, (chronic 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: (brief/occasional) no harm likely

Inhalation: If dust generated by cutting, drilling, etc. is inhaled in excessive quantities over extended periods, respirable dust containing quartz can represent a long term health hazard, while exposure to respirable crystalline silica may cause silicosis.

12 ECOLOGICAL INFORMATION

No data is available on the preparations themselves. When used as intended, no environmental impact is anticipated.

If spillage occurs, do not allow material to enter drains, sewers or water courses.

Waste Disposal

13 DISPOSAL CONSIDERATIONS

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

Additional information

14 TRANSPORT INFORMATION

Not hazardous: no vehicle labelling required.

15 REGULATORY INFORMATION

Chemicals (Hazard Information and Packaging for Supply) Regulations 1997

Danger Classification: IRRITANT (+ hazard symbol)

R38: Irritating to the skin

R41: Risk of serious damage to the eyes

R43: May cause sensitisation by skin contact

S24: Avoid contact with skin

S25: Avoid contact with eyes

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

Other statutory provisions

Health & Safety at Work etc. Order 1978

Control of Substances Hazardous to Health Regulations (COSHH)

Construction (Design & Management) Regulations 2016

Occupational Exposure Limits EH40

Local Exhaust Ventilation HS(G)37

Crystalline Silica EH59

Dust, General Principles of Protection EH44

The Controlled Waste (Duty of Care) Regulations (NI)

IMPORTANT NOTES:

The information contained in this Safety Data Sheet does NOT constitute the user's own assessment of workplace 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

16 OTHER INFORMATION

Data and advice in this Safety Data Sheet apply when the products are used as intended.