

MATERIAL SAFETY DATA SHEET

1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

Name **SHOTCRETE 513.**
Application As a fast setting shotcrete
Company: **Natural Cement Distribution Ltd.**
Address 15 Fountain Parade, Off Spark Lane, Mapplewell, Barnsley. S75 6FW
Telephone 01226 381133/381155 Fax 01226 381177 www.naturalcement.co.uk

2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition SHOTCRETE 513 is a mix of Natural Cement and sand. By its nature, it can vary slightly in composition. Like Artificial Portland Cements it is composed of Calcium Aluminates and Silicates, with small Quantities of Lime and Magnesium, plus sulphates of Sodium, potassium and Calcium.

3: HAZARDS IDENTIFICATION

| | | |
|------------------|----------------|---|
| As Powder | Irritant (XI). | SHOTCRETE 513 contains a very fine powder. It should not be allowed to come into contact with the eyes. Risk Phrases R36, R37, R36 |
| During Hydration | Irritant (XI). | As with all cements, SHOTCRETE 513 releases a strong alkali when it comes into contact with water (Hydration), including the mucous membranes of the nose, mouth and eyes. This alkali may occasionally cause burns or irritation. There is a possibility of an allergic reaction in hypersensitive individuals to salts of trace elements Chromium, formed during Hydration. Risk Phrases R41, R43. Avoid prolonged contact with wet Paste, Mortar or Concrete. Upon Hydration (After Mixing with water) a little heat is released. This is not a dangerous level. |

4: FIRST AID

| | | |
|--------------------|--------------|---|
| As Powder | Eye Contact | Irrigate immediately and profusely with clean water, to eliminate all trace of the powder. |
| | Skin Contact | Wash immediately and profusely with Soap and Water. |
| | Inhalation | Remove subject into fresh air until symptoms subside. |
| | Ingestion | Give plenty of water to drink. If symptoms persist, seek medical attention. |
| As Hydrated Cement | | In the event of a burn or irritation, wash the area thoroughly with cold water and seek medical advice. |

5: FIRE FIGHTING MEASURES

SHOTCRETE 513 is not flammable. (UN. Class MO), nor will it facilitate the combustion of other materials.

6: ACCIDENTAL RELEASE

As Powder Measures

Avoid Breathing the powder or dust.

Clean up powder spillage with brush or vacuum cleaner, taking care not to raise excessive dust.

As Hydrated Cement

Allow to set before cleaning up.

7: HANDLING & STORAGE

Packing

SHOTCRETE 513 is normally packed in a polyethylene inner bag within a stitch sealed polypropylene outer bag.

Safety

Avoid spillage from broken bags.

Avoid raising dust while sweeping.

Wear suitable protective clothing when handling bags, which may have small amounts of material on the outside.

Storage

Store in dry conditions.

8: EXPOSURE CONTROL

As powder

No specific data is available, but exposure tolerances would be greater than those for Portland Cement:
10mg/M3 total inhalable dust, 5mg/M3 respirable dust.
8 Hr TWA

Personal Protection

Avoid breathing the powder

Avoid raising dust

WEAR SAFETY GOGGLES, WORK GLOVES and DUST MASK

When Mixing

Always add the powder to the water in order to avoid raising dust.

WEAR SAFETY GOGGLES and WATERPROOF

GLOVES

Discard immediately any clothing that becomes saturated with wet cement.

When Working

Avoid contact with the wet mortar, concrete or grout during the setting reaction. WEAR WATERPROOF GLOVES

Discard immediately any clothing that becomes saturated with wet cement.

9: PHYSICAL AND CHEMICAL

| | |
|----------------------|--|
| Appearance | Beige Grey Powder |
| PH value | 12 to 13 in water |
| Apparent Density | 1.0 |
| True | 2.7 |
| Solubility in water. | The dissolution is accompanied by the precipitation of the hydrates formed, i.e. on contact with water SHOTCRETE 513 part dissolves, combines with the water and sets hard. Setting Time is 4 mins at 20°C. |

10: STABILITY AND REACTIVITY

SHOTCRETE 513 Is stable and inert when set, and as a DRY powder

11: TOXICOLOGY INFORMATION

SHOTCRETE 513 Is not toxic.
In the case of prolonged contact while setting, SHOTCRETE 513 can cause desiccation of the skin and/or mucous membranes.
When the setting reaction is occurring, certain salts of trace (e.g. Chromium) can cause an allergic reaction to the skin of certain individuals after long or repeated contact.

12: ECOLOGICAL INFORMATION

Manufacture SHOTCRETE 513 is manufactured in plant equipped with filters preventing emission of dust to the atmosphere.
SHOTCRETE 513 is transported pneumatically within the plant to avoid dust emissions.

In use After setting and hardening, SHOTCRETE 513 mortars, concretes and grouts are insoluble and stable.

13: DISPOSAL CONSIDERATIONS

As Powder Unused SHOTCRETE 513 should be set with water before disposal.

As Paste, Mortar or Concrete. Once set SHOTCRETE 513 is inert, not toxic, non-biodegradable, and will not affect drinking water.

General Disposal should always comply with local, National and/or EC regulations.

14: TRANSPORT INFORMATION

SHOTCRETE 513

Requires no special precautions.

15: REGULATORY INFORMATION

SHOTCRETE 513

Is not subject to regulatory legislation.

This SAFETY DATA SHEET supplements, but does not replace, other information given regarding the use of SHOTCRETE 513.

The user bears the responsibility to ensure that SHOTCRETE 513 is used only in accordance with our instructions for the purposes intended.

R36 Irritant to Eyes.

R37 Instant to Respiratory System.

R38 Irritant to Skin.

R41 Risk of serious damage to Eyes.

R43 May cause sensitisation by skin contact.

S2 Keep out of reach of Children

S22 Do not breath dust.

S24 Avoid contact with skin.

S26 In case of contact with Eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty of soap and water.

S36 Wear suitable protective clothing

S37 Wear Suitable Clothing

S39 Wear eye and face protection.

Risk Phrases applicable to the powder.

Risk Phrases applicable during hydration

Safety Phrases

16: OTHER INFORMATION

Further advice and information regarding the handling of cement products generally is available from: -

Natural Cement Distribution Ltd

15 Fountain Parade, Mapplewell, Barnsley, South Yorkshire. S75 6FW

TEL: 01226 381133

Fax: 01226 381177

www.naturalcement.co.uk

CONTAC Health Hazard Information Sheet No- 26 (Cement)

Health and Safety at Work Act 1974 Control of Substances Hazardous to Health (Regulations) 19%

Portland Cement Dust - Criteria Document for an Occupational Exposure Limit. H.S.E. Guidance Note EH 26

H.S.E. Leaflet MS (B) G

H.S.E. Guidance Note EH40

Manual Handling Operations Regulations 1992

Chemicals (Hazard Information and Packaging) Regulations 1993

This SAFETY DATA SHEET is compiled in the full state of our current knowledge of the product in JAN 2009, and is subject to revision without notice. Users should ensure that they are aware of the latest revisions.