



QUADRABUILD

# Crack-Stitching Grout

## USER INFORMATION AND MIXING INSTRUCTIONS

### Uses

QuadraBuild Grout is a cement-based grout supplied in two parts for site mixing by competent operatives. The grout is intended for use in masonry repair situations, primarily in conjunction with stainless steel helical reinforcing bar.

For technical queries, please contact your supplier or QuadraBuild directly using the details at the foot of this page.

### Storage

This grout must be stored under cover, in sealed containers and clear of the ground. It should be protected from frost and draught and kept in cool, dry conditions. When stored correctly and used within 3 months, the activity of the reducing agent will be maintained and the product will contain no more than 0.0002% (2ppm) soluble chromium of the total dry weight of the cement.

The shelf life is 3 months when stored in accordance with the above recommendations.

### Health and Safety

This product is classed as Irritant and can cause serious injury if used incorrectly.

All operatives should read and understand the product Material Safety Data Sheet before using this product.

### Mixing Instructions

#### **Tools required for mixing:**

Powder and liquid grout components, mixing bucket, rotary drill with mixing paddle, bucket trowel.



#### **Notes:**

Check that the bag containing the powder and bottle containing the liquid are sealed. The loss of any part of the powder or liquid may seriously affect the performance of the grout as there are a number of essential additives. Only mix a whole measure of one bag and one bottle at a time. It is important to ensure that all of the powder and all of the liquid are added to the bucket to ensure the correct consistency and chemical mix is achieved. Ensure that the materials and tools needed to use the grout are prepared before starting to mix as there is a limited working time once the grout has been mixed.

1. Shake the bottle well to mix the contents before removing the cap and carefully pouring all of the liquid into the bucket.
2. Carefully open the bag of powder and pour one half into the mixing bucket.
3. Using the drill and mixing paddle, combine the powder and liquid components together. Start mixing slowly to avoid a large release of dust and gradually increase the drill speed. Use a bucket trowel to scrape any powder from the edges of the bucket before mixing in using the paddle.
4. Once there is no powder remaining unmixed in the bucket, add the rest of the powder into the bucket and mix well with the paddle.
5. When all of the powder and liquid has been combined, continue to mix for 2 minutes on medium to high speed. The grout is then ready to use as required.
6. If the grout is left and becomes too stiff to use, it can often be returned to the bucket and re-mixed to allow an extra few minutes of working time. Adding air to the mixture using the mixing paddle will help the grout to flow.



QUADRABUILD



QUADRABUILD

# Crack-Stitching Grout

## MATERIAL SAFETY DATA SHEET

### 1. Identification of the substance/mixture and of the company/undertaking

Product type	Cement based grout
Intended use	Masonry Repair
Trade name	QuadraBuild Grout
Supplier of product	Stati-CAL Ltd or QuadraBuild Ltd
Registered office	Unit 1 Falkland Farm, Andover Road, Wash Water, Newbury, RG20 0LP
Telephone contact number	02037 455 485
E-mail contact	sales@QuadraBuild.com
Web site	www.quadrabuild.com

### 2. Hazards identification

#### 2.1 Classification of the mixture

Hazard class	Hazard category	Hazard statements
Skin irritation	2	H315: Causes skin irritation
Serious eye damage/eye irritation	1	H318: Causes serious eye damage
Skin sensitisation	1	H317: May cause an allergic skin reaction
Specific target organ toxicity single exposure respiratory tract irritation	3	H335: May cause respiratory irritation

#### 2.2 Label Elements

##### Signal word

Danger

Contains Portland cement clinker.

##### Hazard Pictograms



##### Hazard statements

H318 - Causes serious eye damage.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H335 - May cause respiratory irritation.

##### Precautionary statements

P102 - Keep out of reach of children.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338+P310: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor/physician

P302+P352+P333+P313: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention  
P261+P304+P340+P312: Avoid breathing dust/fume/gas/mist/vapours/spray. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a doctor/physician if you feel unwell.

P501 - Dispose of contents/container to: Harden by application of water and dispose of as concrete waste

##### Supplemental information

Skin contact with wet cement, fresh concrete or mortar may cause irritation, dermatitis or burns. May cause damage to products made of aluminium or other non-noble metals

#### 2.3. Other hazards

Cement does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH (Regulation (EC) No 1907/2006). When cement reacts with water, for instance when making concrete or mortar, or when the cement becomes damp, a strong alkaline solution is produced.

Due to the high alkalinity, wet cement may provoke skin and eye irritation. Cement is either naturally low in soluble chromium VI or reducing agents have been added to control the levels of sensitising soluble chromium (VI) to below 2 ppm (0.0002%) of the total dry weight of the cement ready for use.

### 3. Composition/information on ingredients

Common cement types according to the EN 197-1 (Common cements) and EN 197-4 (Blast furnace cements) standards. The principal constituents of these cements are calcium silicates, aluminates, ferroaluminates and sulfates. Small amounts of alkalis, lime, magnesia and chlorides are also present together with trace amounts of chromium compounds. Additional constituents may also be present - eg, fly ash, limestone, clay and granulated blast furnace slag.



QUADRABUILD

# Crack-Stitching Grout

## MATERIAL SAFETY DATA SHEET continued

### 4. First-aid measures

**Inhalation** -Move to fresh air. Contact a physician if irritation persists or later develops.

**Ingestion** -Do not induce vomiting. If conscious, wash out mouth with water and drink plenty of water. Get immediate medical attention.

**Skin Contact** -Rinse with plenty of water. Remove contaminated clothing. Seek medical attention in cases of irritation or burns.

**Eye Contact**-Do not rub eyes. Remove contact lenses. Open the eyes and rinse with plenty of clean water for at least 45 minutes. Contact an occupational medicine specialist or eye specialist.

### 5. Fire-fighting measures

The product is non flammable, non explosive and will not facilitate nor support the combustion of other materials.

Fire or high temperature may create Carbon dioxide (CO<sub>2</sub>) and Carbon Monoxide (CO).

Use protective equipment suitable for surrounding materials.

All types of extinguishing media are suitable.

### 6. Accidental release measures

**Personal protection**- Wear protective equipment as identified in section 8 and follow handling advice in section 7.

**Environmental protection**-Avoid entry into sewerage and drainage systems or into bodies of water.

**Cleaning up**- Collect dry material with a suitable vacuum cleaner. Contain and allow mixed product to harden before disposal and dispose of as concrete waste.

### 7. Handling and storage

The product must be stored under cover, in sealed containers and clear of the ground. It should be protected from frost and draught and kept in cool conditions. When stored correctly and used within 6 months, the activity of the reducing agent will be maintained and the product will contain no more than 0.0002% (2ppm) soluble chromium of the total dry weight of the cement.

Avoid dust development when unpacking and mixing.

Carrying of the product may cause sprains and strains to the back, arms, shoulders and legs. Use appropriate manual handling control measures.

### 8. Exposure controls/personal protection

**Occupational Exposure Controls**- Avoid contact with the product to skin and eyes. Avoid inhalation of airborne dust.

**Hand protection**- Wear protective gloves. PVC or rubber gloves are recommended.

**Respiratory protection**- When dust is present use dust mask/respirator with particulate filter.

**Engineering measures**- Provide adequate ventilation.

**Eye protection**- Where splashing is expected, suitable eye protection goggles/face shield should be worn.

**Other protection**- Wear appropriate clothing to prevent any possibility of skin contact.

**Hygiene measures**- Change contaminated clothing. Do not eat drink or smoke whilst using the product.

### 9. Physical and chemical properties

Finally ground dry grey powder and liquid components.

### 10. Stability and reactivity

**Stability**: Stable as long as stored correctly. When mixed the product will harden into a stable mass which is not reactive under normal conditions.

**Conditions to avoid**: Excessive heat, water, moisture.

**Materials to avoid**: aluminium powder.

**Hazardous decomposition products**: Does not decompose into hazardous by-products.

**Fire creates**: Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>)

### 11. Toxicological information

**Inhalation** -Dust may irritate the throat and respiratory tract. Chronic exposure to dust may cause sneezing, coughing, shortness of breath and chronic obstructive lung disease (COPD).

**Ingestion** -Ingestion may cause severe irritation of the mouth, oesophagus and gastrointestinal tract.

**Skin Contact** -May cause thickening, cracking or fissuring of the skin. Prolonged contact with abrasion can cause severe burns. Some individuals may exhibit eczema upon exposure to wet cement, caused either by the high pH which induces irritant contact dermatitis, or by an immunological reaction to soluble Cr (VI) which elicits allergic contact dermatitis. The response may appear in a variety of forms ranging from a mild rash to severe dermatitis and is a combination of those two mechanisms. An exact diagnosis is often difficult to assess. If the cement contains a soluble Cr (VI) reducing agent and as long as the mentioned period of effectiveness of the chromate reduction is not exceeded, a sensitising effect is not expected.

**Eye Contact**-Direct contact may cause corneal damage, immediate or delayed irritation or inflammation. Direct contact by larger amounts may cause effects ranging from moderate eye irritation to chemical burns and blindness.



QUADRABUILD

# Crack-Stitching Grout

## MATERIAL SAFETY DATA SHEET continued

**Specific Effects** -Some individuals may exhibit eczema upon exposure to wet cement, caused either by the high pH which induces irritant contact dermatitis, or by an immunological reaction to soluble Cr (VI) which elicits allergic contact dermatitis. The response may appear in a variety of forms ranging from a mild rash to severe dermatitis and is a combination of those two mechanisms. An exact diagnosis is often difficult to assess. If the cement contains a soluble Cr (VI) reducing agent and as long as the mentioned period of effectiveness of the chromate reduction is not exceeded, a sensitising effect is not expected.

### 12. Ecological information

The product is not expected to be hazardous to the environment but the addition of large amounts of the product to water may cause a rise in the pH and therefore be toxic to aquatic life under certain circumstances.

The product is not volatile, however the dry product may become airborne during handling.

After hardening, the product presents no toxicity risk. The product is not biodegradable.

### 13. Disposal considerations

Dispose of waste and residues in accordance with local authority requirements. Material that has exceeded its shelf life should be disposed of according to local legislation. Allow mixed product to harden before disposal and dispose of as concrete waste. Avoid entry into sewerage and drainage systems or into bodies of water. The fully cured material is not considered as hazardous waste.

### 14. Transport information

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

### 15. Regulatory information

#### EU regulatory information

Cement is a mixture according to REACH and is not subject to registration. Cement clinker is exempt from registration (Art 2.7 (b) and Annex V.10 of REACH). The marketing and use of cement is subject to a restriction on the content of soluble Cr (VI) (REACH Annex XVII point 47 Chromium VI compounds).

#### National regulatory information

CONIAC Health Hazard Information Sheet No. 26 (CEMENT) Health and Safety at Work etc Act 1974 Control of Substances Hazardous to Health (Regulations) PORTLAND CEMENT DUST – criteria document for an occupational exposure limit. June 1994 (ISBN 07176 – 0763 – 1) HSE Guidance Notes EH26 (Occupational Skin Diseases – Health and Safety Precautions) HSE Guidance Note EH40 (Workplace Exposure Limits) Any authorised manual on First Aid by St. John's/St. Andrew's/Red Cross Manual Handling Operations Regulations Environmental Protection Act

### 16. Other information

#### Training Advice

In addition to health, safety and environmental training programs for their workers, companies must ensure that workers read, understand and apply the requirements of this MSDS. The product should be used only by competent, trained personnel having read and understood this documentation along with the relevant user information supplied with the product.

#### Relevant H-Statements

H315: Causes skin irritation

H318: Causes serious eye damage

H317: May cause an allergic skin reaction

H335: May cause respiratory irritation

#### Disclaimer

The information on this data sheet reflects the currently available knowledge and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product, including the use of the product in combination with any other product or any other process, is the responsibility of the user. It is implicit that the user is responsible for determining appropriate safety measures and for applying the legislation covering his/her own activities.



QUADRABUILD