

# CONCRETE AQUA GUARD CRYSTAL GROUT F

#### DESCRIPTION

Crystal Grout F is a high-strength waterproof fibre reinforced shrinkage compensated grout that is specially designed to repair leaking cracks, holes and joints. It is formulated with our proven crystaline technology which combines chemically with water and concrete to form millions of needle-shaped crystals. These crystals grow in all directions to fill any capillary pores of the grout to block the passage of water.

#### **FEATURES & KEY BENEFITS**

- High early strength
- Superior bonding ability
- Very high compressive and flexural strength
- Withstands hydrostatic pressure
- Contains no corrosive chemicals or metals
- Safe for contact with potable water
- Can be painted after curing
- Fast and easy to use
- Permanently waterproof
- Increased durability decreases maintenance and repair costs
- Superior performance enhancing your reputation for high quality work
- Contains crystalline technology

# **TYPICAL APPLICATIONS**

- Repair leaking cracks, joints and holes
- Waterproof form tie holes in concrete walls
- Repair spalled or honeycombed concrete
- Use as a waterproof plaster on masonry walls
- Can be used over stone and non concrete substrates

### **APPLICATION GUIDELINES**

Crystal Grout F is mixed (4 parts powder to 1 part clean water by volume), and applied to the prepared surface using a trowel. Do not mix more than can be applied within 15 minutes.

For deep patches or overlay applications thicker than 60 mm mix Crystal Grout F with 30% of 6-12 mm aggregate.

# **TECHNICAL DATA SHEET**

#### COVERAGE

- 1 kg of Crystal Grout F fill about half liter of cavity
- 1 kg/m use as part of the repair system
- 2 kg/m2 per mm applied as a slurry

The coverages are theoretical and depend on other conditions

# STORAGE

Crystal Grout F should be stored at room temperature (min 5°C and max 35°C), kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, then a shelf life of 2 years can be expected.

### PACKAGING

Crystal Grout F is supplied in 20 kg pails.

#### **TECHNICAL DATA**

Color	Dark Grey
Appearance	Powder
Density	1.4 g/cm3
PH (Mixed with water)	12
Compressive strength	25 MPa
Initial set time at 25°C	20 minutes
Hydrostatic resistance	120 mea
Mix ratio	4:1 (By volume)
Cracks self-sealing	0.7mm
Solids content	100%

# **HEALTH & SAFETY**

This product becomes caustic when mixed with water or perspiration.

Crystal Grout F should only be used as directed. We always recommend that the Health & Safety Data Sheet is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection.

# DISCLAIMER

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product, as no warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous. Please check with your office to confirm that this is current issue: (May 2017).

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# TECHNICAL DATA SHEET

#### C E Manufactured For: Concrete Aqua Guard Ltd. Teelin Rd, Carrick, Co Donegal. Ireland 17 1170/CPR/ER.03608 CRYSTAL GROUT F Principle 3 Concrete restoration Method 3.1 Applying mortar by hand EN 1504-3 Products and systems for the protection and repair of concrete structures Essential characteristics Performance Compressive strength Class R2 ≥25 MPa Class R2 ≤0,05 % Chloride content Class R2 ≥ 1.5 MPa Adhesive bond Restrained shrinkage / expansion (dimensional stability) where required. NPD\* Not required if thermal cycling is carried out Carbonation resistance (For durability of corrosion, protection or NPD\* inhibition) where relevant NPD\* Elastic modulus, where relevant Thermal compatibility. Freeze/thaw cycles Class R2 ≥ 0,8 MPa NPD\* Skid resistance, where relevant Coefficient of thermal expansion (only for polymer concretes) NPD\* where relevant Class R2 ≤0.5 kg/(m<sup>2</sup> x Capillary Absorption h<sup>0,5</sup>) Class A1 Reaction to fire NPD\* Dangerous substances