

## A GROUT

### Product code

TG04, TG19, TG20, TG21, TG27 Packaging listed overleaf.

### Description

A Grout consists of a refined lignosulphonate plasticiser plus a finely divided coated aluminium powder. The plasticiser enables high workability mixes to be produced at low water contents and the aluminium powder dissolves in the cement paste to produce a positively expanding material. After setting there is no metallic residue or staining from the low pressure expansion system.

A Grout is chloride free and can be safely used in contact with steel reinforcement, post tensioned cables and pre-stressed wires. The microcellular structure of hardened grout gives low permeability and good freeze thaw stability.

Mixes containing A Grout give good flow and easy placement helping to obtain complete filling of the work piece. The non-shrink characteristics prevent plastic settlement producing permanent contact between grouted surfaces.

**Uses Include:** Grouting cable ducts in post tensioned concrete  
Under-plate grouting  
Underpinning  
Non-shrink repair mixes  
Infill concrete  
Jointing precast units

### Typical Grout Properties @ 20°C

#### Mix Designs

Cement	Sand	Water	A Grout
50kg	None	22litres	1Tub
50kg	75kg	24 litres	2Tubs

#### Compressive Strength

Mix	3 Days	7 Days	28 Days
Cement/ A Grout	26 N/mm <sup>2</sup>	31 N/mm <sup>2</sup>	44 N/mm <sup>2</sup>
Cement/ Sand/ A Grout	21 N/mm <sup>2</sup>	28 N/mm <sup>2</sup>	41 N/mm <sup>2</sup>

Sand should be sharp washed.  
Test cubes should be restrained.

### Free Expansion

Free expansion is in the range 1% to 4% starting 20 minutes after mixing and is complete 2 hours after mixing.

### Setting Times

The inclusion of A Grout does not significantly affect setting times of Portland cement mixes.

### Standards

A Grout has been tested in accordance with the appropriate parts of EN 12390, ASTM C827

### Specification Outline

Grouting shall be carried out using A Grout as manufactured by Parex Ltd. The product must be stored, handled and placed strictly in accordance with the manufacturer's instructions.

### Quality Assurance

Parex Ltd is a firm of Assessed Capability. The company's quality system conforms to BS EN ISO 9001:2008 and is assessed by UK CARES LTD.

### Instructions For Use

#### Preparation

**Cable Ducts:** Cable ducts, injection points and injection equipment should be tested for leaks using suitable water pressure. Before grout injection water should be blown out.

**Under-plate Grouting:** Formwork should be erected and made grout tight. The formwork must be designed with sufficient head to ensure grout flow into and across the grouting area. Saturate the grouting area with water, leave for one hour then blow out any surplus water.

#### Mixing

For 50kg cement mixes the use of a high torque slow speed drill with a Grout Stirrer is suitable. For larger mixes use a standard grout mixer such as the Groutmaster Range or the Keller SD Series. Pour the required quantity of clean water into the mixing vessel. Slowly add the cement or cement and sand to the water whilst continually mixing and sprinkle in the A Grout. Continue mixing for three minutes to achieve a consistent mix. Pass mixed grout through a suitable sieve to remove any formed lumps.

## A GROUT

### Placing

*Cable Ducts:* Cable duct grouting will be carried out by pumping. Ensure a continuous supply of grout to the pump using a holding tank if necessary. Agitate grout in the holding tank to assist with maintenance of grout fluidity. The continuous feed of freshly mixed grout enables early placement to obtain maximum expansion effect.

*Under-plate Grouting:* Grout should be placed within 20 minutes of mixing. Place continuously from one side of the formwork until grout appears at the opposite side of the grouting area. Do not disturb once grouting has been completed until grout has hardened.

### Curing

A Grout mixes may be placed at temperatures between 5°C and 45°C. For temperatures outside this range contact the Technical Service Department.

Placed grout which is exposed should be cured in accordance with good concrete practice including water spray and spray applied curing membrane.

### Precautions

#### Health and Safety

A Grout is alkaline when mixed with water and should not come into contact with skin or eyes. Avoid inhalation of dust during mixing and wear safety glasses, dust mask and gloves. If skin contact occurs wash thoroughly with clean water. Should eye contact occur rinse immediately with plenty of clean water and seek medical advice. Full health and safety data is given in Product Safety Data Sheet.

#### Fire

A Grout is non-flammable.

#### Yield

Each neat cement mix containing 50kg cement and one tub of A Grout will yield approximately 36 litres of mixed material.

Each cement /sand mix containing 50kg cement and 75kg sand plus two tubs of A Grout will yield approximately 68 litres of mixed material.

### Storage And Shelf Life

A Grout will have a storage life of 6 months in unopened tubs when kept in dry conditions at a temperature between 5°C and 45°C. Storage at higher temperatures and high humidity may reduce shelf life.

### Packaging And Ordering

A Grout is supplied in:

200gram plastic tubs:	Product Code: TG04
10kg plastic bag:	Product Code: TG19
2kg plastic bag:	Product Code: TG20
3.2kg plastic bag:	Product Code: TG21
Bulk option available:	Product Code: TG27

For further information and sales please contact your local Parex Office as listed overleaf.

Parex Ltd products are guaranteed against defective materials and manufacture. Products are sold subject to the Parex Ltd Terms and Conditions of Sale, copies of which are forwarded on invoice and are available on request. Parex Ltd endeavours to ensure that the above data and any further advice is correct, however, it cannot accept any direct or indirect liability for the use of its products as such usage is beyond its control.