

# TECHNICAL INFORMATION

## Thixotropic Cementitious Grout HIGH STRENGTH

### Product Data Sheet: Construction and Installation Grouts

#### DESCRIPTION

(D.o.T. Highways Spec: - 2601 Compliant)  
**Strucsol Thixotropic Cementitious Grout** is a non shrink, high strength cementitious grout comprising of low alkali high specific area Portland cements and other cementitious binders combined with high purity aggregates and a system of compatible admixtures to achieve high in service performance. This grout has high flow characteristics to achieve penetration and levelling with no bleed and zero shrinkage when placed at 0.15 water solid ratio.

#### USES

**Strucsol Thixotropic Cementitious Grout** has been specifically designed to suit a wide range of uses, including:

- Crack Stitching & masonry beaming
- Bonding of helical bar into all masonry structures (including lime mortar brickwork and stonework)
- Anchor or base plate grouting
- Under machinery and stanchion plates
- Grouting rails and bridge bearings, fixing bolts, parapet rails etc. It can also be used in its plastic state as a bedding mortar.

#### KEY PROPERTIES

- Equivalent Sodium Oxide is less than 3.0kg/m<sup>3</sup>.
- Complies with BS EN 1504-3 class R4
- High ultimate strength.
- Non-shrink.
- Can be used for grouting sections up to 100mm thick.
- Chloride free.
- High fluidity – can be pumped or poured.
- Complies with U.S. Corps of Engineers Specification CRD-C 621.
- High yield 25kg bag.

#### TYPICAL PERFORMANCE

Compressive Strength (N/mm <sup>2</sup> )	
1 day	13-15
3 day	33-35
7 day	38-40
28 day	50
Flexural Strength (N/mm <sup>2</sup> )	
1 day	3-3.5
3 day	5-5.5
7 day	5.75-6.25
28 day	6.75-7.25
Bond Strength (N/mm <sup>2</sup> )	>1.7N/mm <sup>2</sup>
28 day	
Setting Times (Minutes)	
Initial	240
Final	360
Expansion Results (%)	
1 day	0.003%
7 day	0.003%
Water/Solid ratio	0.15
Pot Life	Approximately 45 mins (Can vary with temperature)

Data is sourced from tests performed in controlled laboratory conditions at 20°C.

#### YIELD

The approximate yield of mixed grout per 2.7kg of dry powder is 2.2ltr

The approximate yield per 6.5kg tub is 4.5 Litres

For more details contact:  
0116 2375082 info@jtcltd.co.uk

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## MIXING INSTRUCTIONS

The grout should be mixed with the fluid contained in the bucket. It should be mixed using a paddle whisk.

1 bag (2.7kg) of the grout powder should be added carefully to one pouch of fluid (instructions on pouch), progressively mixing until a fluid grout consistency is achieved.

## APPLICATION AND PLACING

**Strucsol Thixotropic Cementitious Grout** can either be poured or pumped into position. Due to the relatively short pot life pumped operations must be executed quickly particularly in warm weather conditions.

For best results the grout should be placed immediately on completion of mixing. Ensure all surfaces with which the grout will come into contact are clean and dust free. Ideally, concrete substrates should be thoroughly soaked for several hours prior to the grout being applied to reduce suction.

## APPLICATIONS OTHER THAN CRACK STITCHING & BEAMING

Permeable concrete should be treated with a suitable concrete primer such as **SBR Primer**. Shutters must be impermeable to the passage of water and both strong enough and sufficiently supported to contain the placed grout. When gravity placed, sufficient hydrostatic head must be given and grout volume maintained to enable the material to flow completely through the void to be filled from one side of shutter only. A minimum 50mm head is recommended. Immediately prior to placement all excess water should be removed. Any grout exposed to wind or drying conditions should be suitably protected, preferably by coating with a wax-free Curing Agent.

Any grout that is likely to be subject to low temperature immediately after placing or during its early strength development should be protected by covering with hessian or other insulative material. For concreting in cold weather reference should be made to BS8110 Pt. 1 Section 6.

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[www.strucsol.co.uk](http://www.strucsol.co.uk)

Photo demonstrating helical bar bonding use of Strucsol Grout



Grout should be chamfered to ensure that unrestrained shrinkage cracking does not occur.

## QUALITY CONTROL

All Strucsol products are factory blended, tested and packaged to quality control procedures in accordance with BS EN ISO 9001.

## CLEAN UP AND SPILAGES

Dry powders should be swept up and disposed of in accordance with the Local Authority.

## PACKAGING AND STORAGE

**Strucsol Thixotropic Cementitious Grout** is available in nominal 6.5kg buckets, palletised and shrink wrapped.

Palletised **Strucsol Thixotropic Cementitious Grout** should be stored in cool dry areas clear of the ground, sheeted or under cover and stacked not more than two pallets high. The product should be used on a first in – first out basis.

Shelf life is 12 months in the buckets (from the date shown on the bucket). Subject to correct storage conditions.

## **HEALTH & SAFETY**

Health and safety advice, which must be followed, can be found on the Material Safety Data Sheet. Users are advised to wear face mask, goggles, gloves and overalls when handling, mixing and applying cementitious products.

Contains Portland Cement Contains Chromium (VI), which may produce an allergic reaction. Clothing contaminated by wet cement should be removed immediately and washed before reuse. R38 - Irritating to skin. R41 - Risk to serious damage to eyes. S26 - In case of contact with eyes, rinse immediately with water and seek medical advice. S37/39 - Wear suitable gloves and eye/face protection. S2 - Keep out of reach of children.

## **INFORMATION, PRICES & ORDERING**

For technical information, pricing and to place orders contact our Sales Office on the following:

**Telephone: 0116 2375082**

**Email: [info@jtcltd.co.uk](mailto:info@jtcltd.co.uk)**

**Visit our website: [www.strucsol.co.uk](http://www.strucsol.co.uk)**

**JT Consulting  
Unit 5Q Sibley Road Industrial Estate  
Barrow Upon Soar  
Leicestershire  
LE12 8LP**

