# Dr. Fixit Unigrout 500



#### HIGH PERFORMANCE NON-SHRINK GROUT FOR 10-100 MM

#### Description

Dr. Fixit Unigrout 500 is a high performance non-metallic, pre-mixed cementitious non-shrink grout for thickness, between 10 mm and 100 mm. Dr. Fixit Unigrout 500 is non-shrink, non-corrosive, non-oxidizing and is free from chlorides and nitrates.

#### **Typical Applications**

- o Under-plate grouting pre-cast concrete,
- o Bedding bearing plates,
- o Anchor bolt fixing, packing and caulking.
- o Filling precast joints and tie rod holes

#### **Features**

- o Free of bleeding and settlement.
- o Good fluidity for easy application in difficult to access areas.
- o High non-corrosive bonding to steel and concrete.
- o Excellent flow and high early strength characteristics.
- o Non-shrink
- o Chloride free.

## **Packaging**

25 kg bags

## Method of Application

## 1 SURFACE PREPARATION

- o Concrete surfaces should be sound, stable, clean and free from laitance, paint, oil, grease, and any residual mould release agents and curing compounds.
- o An abraded or profiled substrate surface is preferable. Metal surfaces should be free from any rust, scaling or paint and abraded to reveal clean, bright metal finish.
- o Seal the formwork joints using a suitable sealant or gun grade adhesive to prevent leakage.
- o Mineral surfaces should be thoroughly wetted with water for 3 4 hours prior to application of grout.

## 2 APPLICATION

- o Dr. Fixit Unigrout 500 should be mixed in a high shear grout mixer for optimum dispersion and workability
- o Ensure the mixing water is below 25°C using ice if necessary, especially if the ambient temperature is Above 40°C. Ideal mixed grout temperature is 25 30° C
- o Add approximately 85 % of the water required for the chosen consistency to the mixer and then slowly add the powder. Mix for 1 2 minutes and then add remaining water to the desired final consistency. Do not add more than the maximum recommended water quantity.
- o Should the necessity arise, Dr. Fixit Unigrout 505 can be installed beyond 100 mm thickness by mixing 1:1 or 2:1 by weight of 10 mm clean, graded aggregates to a required consistency. This aggregate should be added at this stage prior to final mixing.
- o Mix for an additional 2 3 minutes until a smooth, uniform, homogenous mix is achieved.
- o Mix water as recommended for required consistency, pour the mixed grout via a hopper from one side only to avoid air entrainment. Maintain a head of at least 150-250 mm to ensure pressure to promote the material flow.

GROUTS AND ANCHORS1.indd 9 Unigrout 500 14/06/2020



- o Particularly high strengths can be achieved by thorough 'ram' compaction of a 'Drypack' consistency mix of Dr. Fixit Unigrout 500.
- o For large volume pouring it is advisable to use a diaphragm pump.
- o Check for any grout loss through joints. Stop leakages with Dr Fixit Leak Plug
- o Good curing practice is essential for all exposed surfaces. Immediately after pouring apply Rokseal CM. Alternatively cure using water ponding, spray misting or covering with wet sheeting for a minimum of 7 days.

# Precautions & Limitations

- o Do not add extra water beyond recommended in any circumstances.
- o Do not use in unrestrained areas as it may lead to cracks.
- o Shoulder width between base plate and form work should be kept as minimum as possible.
- o Ensure that the shuttering is suitably robust to withstand the weight of grout.

Consult our Technical Department for further details

# Technical Information (Typical properties @ 25 $\pm$ 2° C & 50 %R.H)

PROPERTIES	SPECIFICATION	RESULTS
Wet Density,kg/m³	ASTM C185-02	2200 +/- 50
Consistency	ASTM C1107	Flowable @ 0.16 w/p
Expansion (Plastic) (Hardened)	ASTM C827 ASTM C1090	Upto 2.0 % positive Expansion 0 - 0.3 %
Compressive Strength,	ASTM C109:1999	
1 Day 7 Days 28 Days		25 N/mm² min. 60 N/mm² min. 80 N/mm² min.
Flexural Strength, 28 days	BS 6319 - 3	10 N/mm² min.
Setting Time Initial Final	ASTM C 266	4 - 5 hrs 7 - 8 hrs

Water Requirement for Mix Consistency	Litres per Unit
Flow	4.0 litres
Plastic	3.5 litres

#### Theoretical Coverage

25 kg bag yields: 13.4 ltrs at flowable consistency 12.6 ltrs at plastic consistency

## Storage

When stored in dry conditions in original unopened packaging this product has a shelf life of 12 months. Storage above 35°C and high humidity (above 50 %) will reduce shelf life and product performance.

GROUTS AND ANCHORS1.indd 11 Unigrout 500 14/06/2020



#### Health and Safety

This products contains cement. And contact with skin may cause irritation. It should not be inhaled, and properly designed and maintained face mask should be used whilst handling, pouring and mixing the powder. Avoid contact with the product by working carefully, using a barrier cream and wearing protective gloves. If Any contact does occur, wash thoroughly with soap and water. Use eye protection. Avoid contact with eyes, if such contact occurs irrigate with eater for 20 minutes and seek medical advice. If mistakenly ingested, drink plenty of clean water and seek medical advice. See MSDS for further information.

DR. FIXIT offers a wide range of Structural Protection and Waterproofing systems



WATERPROOFING



CONCRETE & STRUCTURAL REPAIR



CRACKFILL & SEALANTS



BONDING AGENTS



SURFACE PLASTERS



CDOLLTS & ANICHOD



MORTARS



MARBLE & STONE



PERFORMANCE FLOORING



UNDERLAYMENTS



CONSTRUCTION PRODUCTS



TILE ADHESIVES & GROUTS



Pidilite MEA Chemicals LLC

PO Box 120657 Dubai, United Arab Emirates T +971 4 884 9880 F +971 4 884 9879 **Web**: www.pidilitemea.com DISCLAIMER The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.