

## PRODUCT DATA SHEET

# webertec non shrink grout CE

(Formerly known as E.MIX NON SHRINK GROUT CE)

Ultra high strength, aggregate free, excellent flow cementitious grout for underpinning

### PRODUCT

**webertec non shrink grout CE** is an aggregate free grout with very high flow non-shrink cementitious grout. It has ultra-high strength that can also be used for heavy duty underpinning and anchoring. **webertec non shrink grout CE** contains no chloride or other substances, which could aggravate corrosion of reinforcing steel or pre-stressing steel cables. The product can be supplied in bulk volume and pumped when large volume is needed. It requires only the addition of water to produce an easy-to-apply and free flowing grout.

### Uses

- Underpinning grouting
- Free flow precision cement grouting
- Heavy duty support beneath machine base plates, bridge bearings and crane rails
- Heavy duty anchoring including bolts, starter bars, tendons in drilled holes
- Fill in grout for hollow block walls
- Concrete anchors, rail beds and machine foundation

### Features and Benefits

- Expansion system compensates for shrinkage
- Excellent fluidity : suitable for pumping and injection
- High early strength and long-term durability
- No metallic iron content to cause staining
- Chloride free : prevent rusting of the steel and anchor bolts
- Pre-mixed and ready-to-use : requires only addition of water

### TECHNICAL DATA

Colour	Grey
Component	Portland cement, expansive chemicals and other chemical additives
Density	1.0 kg/L (dry)
Pot life	Approx. 30 minutes
Coverage	Approx. 1.5 kg/m <sup>2</sup> /mm
Yield	Approx. 17 L/25 kg bag with 36% water Approx. 59 bags/m <sup>3</sup>

## **PHYSICAL PROPERTIES**

	Fluid	
Water demand (%)	Approx. 36 – 40% (9 – 10 L/25 KG bag)	
Yield/Liters	17 L	
Age	Compressive strength (BS 6319: Pt 2)	
1 day	> 20 N/mm <sup>2</sup>	
3 days	> 35 N/mm <sup>2</sup>	
7 days	> 45 N/mm <sup>2</sup>	
28 days	> 66 N/mm <sup>2</sup>	
Expansion at 24 hours		> 0.4%
Flow of grout	ASTM C 939	< 30 seconds
Setting time	ASTM C 953	< 7 hours
Bleeding		No bleeding
Bond strength (7 days)	BS 6319 : Part 4, HKHA MTS (2002/2004) Spec. Part D, Cl. 2.1.14	> 1.0 N/mm <sup>2</sup>
Flexural strength (28 days)	BS 6319 : Part 3	> 6.0 N/mm <sup>2</sup>
Chloride content	BS 1881 : Pt 124	< 0.01%

Unless specified, all technical data are average values and refer to 28 days curing time.

Above physical data are taken on laboratory tests. In situ material performance may vary according to environmental & workmanship conditions beyond manufacturer control.

### **Complied Standards**

American Standard: ASTM C 939 (Flow cone method)  
ASTM C 953 (Setting time)

British Standard: BS 6319 : Pt 3 : 1983 (Flexural strength)  
BS 6319 : Pt 4 : 1984 (Bond strength)  
BS 1881 : Pt 124 : 1988 (Chloride content)

## **PROCEDURE**

### **Substrate Preparations**

The substrate surface must be clean, sound and free from oil, grease, curing compounds or any loose materials.

Bolts and anchor holes must be clean and free from dust or loose material.

It is essential to pre-soak the concrete substrate prior to application of **webertec non shrink grout CE**.

Excess water should be removed prior for grouting.

### **Mixing and Installation**

Mix a bag of dry-mixed powder (25 KG) with approx. 36 – 40% (9 – 10 L) of water.

Only use a controlled amount of fresh clean water.

To obtain an optimum result, 3 – 5 minutes of mixing by electrical mixer with high shear stirrer is required.

Machine mixing is recommended to achieve continuous mixing and application.

It is essential that the ambient temperature to be above +5°C, and grouting to be applied within 30 minutes of mixing.

Do not use mechanical vibrators to assist flowing, as this will cause segregation of product.

Please refer to our method statement for procedures in details.

### **Curing**

Upon completion of grouting, the exposed area should be covered with wet hessian or plastic sheet to prevent excessive moisture loss.

### **STORAGE AND PACKING**

**webertec non shrink grout CE** is delivered in 25 kg bag. Storage life is 12 months if the product is kept in a dry place.

### **HEALTH AND SAFETY**

Recommend to wear NIOSH approved or equivalent particulate face mask when mixing the material.

Material contains cement, which may produce an allergic effect.

Material may cause irritation to eyes and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical assistance. After contact with skin, wash immediately with plenty of soap and water.

Keep out of reach of children.

Please refer to Material Safety Data Sheet (MSDS) for health, safety and handling of the product.

\* Note: The information and physical data in this catalogue is given to the best of our knowledge under standard testing method and controlled environment. The results may vary with different weather / site conditions, workmanship or substrates. This is beyond our control that we shall not be liable for any faults or consequences arising or associated with this. We suggest comprehensive tests to be conducted before final application. Unless specified, all technical data are average values with curing time of 28 days. We reserve the right to update or amend the contents in the light of new findings during the course of research and development.