

FLOWCAST PT

Shrinkage Compensated Fluid Grout for Post Tensioned Cables

Description

FLOWCAST PT is a high performance, controlled expanding, shrinkage compensated anchoring grout. It is specially designed to produce a high fluid, non-shrink grout with extended working time. **FLOWCAST PT** contains chemical additives to provide corrosion protection and waterproofing for highly stressed steel cables, electrical cables, anchorage and rods. Its fluid characteristics allow the product to be pumped through small openings over long distances and placed into relatively inaccessible areas.

Features & Benefits

- Pre-packed, ready to use.
- Shrinkage compensated.
- Excellent corrosion protection
- High strength and cohesion property
- Excellent bonding properties
- Excellent flow characteristics and self-compacting.
- Low permeability and durable.
- Chloride and sulphate free.

Uses

FLOWCAST PT has high fluidity, extended working time, none bleeding, segregation or plastic settlement shrinkage controlled with high strength and resistance to chloride penetration. It is used for grouting applications include:

- Post tensioning cables grouting where complete encapsulation of the reinforcing and protection from corrosion are required.
- Grout of small opening over long distances with extended working time.
- Underground structures grouting such as rock bolts, cable anchoring and grouted fore-poling.
- Grouting cable anchorages for highly stressed reinforcing steel
- Grouting deck ducts, bridges, cable ducts, ect.
- Grouting electrical cables to protect from water diffusion.

Technical Properties

Appearance	Grey Fine Powder
Wet Density	2,000 Kg/m ³ approx.
Fluidity (EN 445)	10-20 seconds (Initial) 10-20 seconds (after 30min)
Bleeding	<2% by volume @ 3hrs
Volume change	Up to +4% @ 24hrs
Chloride/ Nitrate content	Nil
Compressive strength	
After 3 days	≥30 N/mm ²
After 7 days	≥42 N/mm ²
After 28 days	≥55 N/mm ²
Flexural Strength	
After 7 days	5.5 N/mm ²
After 28 days	7 N/mm ²
Setting time	
Initial	5 hours
Final	7 hours

All values are subject to 5-10% tolerance

Standard Compliance

- ASTM C580, C1107-02, C1090
- EN 445, 446 & 447
- BS 8110 Pt 1, Sec. 8 & BS 4551
- UNI 8147

Application Procedures

Surface preparation:

All areas or ducts to be grouted should be cleaned before applications. Any free water must be drained out. Cable anchorages should be sealed before the duct grouting is carried out. Ensure sufficient material are available at site to ensure continues grouting.

Mixing Instructions:

Mix one 20 Kg bag of **FLOWCAST PT** with 6.5 to 7 Lt. of clean water (avoid using warm water his temperature higher than 25 °C). For mixing small quantity use a slow

speed drill fitted with a suitable paddle. For mixing large quantity, it is recommended to use proper grout vane mixer. Adding more water than the specified limits will result in loss of properties. Mix for 5 minutes till obtaining a homogeneous product, free from lumps.

Application Instructions:

Place **FLOWCAST PT** immediately after mixing into the prepared area by pouring or pumping in a continuous manner and do not allow air pockets to develop. The placing should be within maximum 20 minutes of mixing to gain benefit of the expansion process.

Ensure proper evacuation of air, filling process must be started from one side till the grout flows at the other side. When completing the job, clean the used tools immediately with clean water before the grout dries out.

FLOWCAST PT can be placed in annular gaps of up to 75 mm in thickness.

Yield / Consumption

13.5 Ltr/ 20Kg bag at flowable consistency.

Packaging

FLOWCAST PT is available in 20 Kg bags.

Storage

Keep the product in dry and sheltered place at temperature between +5°C to +35°C. In these conditions and in closed original containers, the product will have a shelf life of at least 6 months.

Health and Safety

Wear gloves, goggles to avoid any contact with eyes and skin. In case of splashes in the eyes wash abundantly with warm water and consult a doctor.

For further information or particular use, contact SBI Technical Department.

Quality & Care

All products produced in SBI facilities are manufactured under a management system certified to conform to the requirements of the quality and environmental health & safety standards ISO 9001 & ISO 14001.

SBI products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service. All SBI datasheets are updated on a regular basis. It is the user's responsibility to obtain the recent version.

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SALES OFFICE : Jebel Ali, Industrial 1
FACTORY : RAK, Jazerat Al Hamra

Tel.+971 4 880 2131
Tel. +971 7 2210066
www.sbi-me.com , info@sbi-me.com

