

# TECHNICAL DATA SHEET

### RAPID SETTING CEMENT BASED, WATER STOPPING MORTAR

## Description

PLUGCON is supplied as a ready to use blend of dry powders which requires only the site addition of clean water to produce a highly consistent, rapid setting mortar which is easy to apply in many difficult conditions. The material is based on a blend of cements, graded aggregates, special fillers and chemical additives which control the rate of set and minimise the risk of thermal cracking.

#### Uses

- To instantly seal negative water pressure leaks through cracks, gravel pockets and casting joints
- To instantly seal water leakage during waterproofing of water tanks, basements and sunken pits etc.
- Instant sealing of water drainage outlets during waterproofing treatments
- Instant sealing of leakages in concrete/masonry structures
- As plugging mortar for fixing nozzle / grouting ports during injection grouting.

#### Advantages

- Emergency water-stopping capability
- Single component only the addition of clean water is required
- Excellent bond to the substrate
- Low exotherm minimises thermal cracking
- Pre-bagged formulation to overcome variations in site batching
- Contains no chloride admixtures

## Technical Data

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• Form	:	Powder	
• Colour	:	Grey	
Curing	:	Immediately	after
addition			
		of water	
<ul> <li>Bulk Density</li> </ul>	:	1.2 gm/cc	
Compressive strength		-	
(BS 6319 Pt 2: 1983)	:	5N/mm2 @ 2 hours	
		32N/mm2 @ 28 days	
<ul> <li>Initial set time</li> </ul>		-	
(W/P-0.30, 27 °C)	:	Approx. 1 min	

#### **Application Instruction**

#### SUBSTRATE PREPARATION:

Widen and deepen the leakage area in dove-tail fashion by approximately 20 mm using a chisel to allow a small amount of product to be packed into the void and optimise the bond to the substrate. Area of application to be cleaned mechanically to make it free from loosely adhering particles, laitance, oil, grease, etc.

### MIXING:

Pour a small amount of clean water in a suitable mixing container.

Mix one part clean water: 3 parts PLUGCON (measured by volume).

Stir the mix together quickly with a trowel, spatula or gloved hand to form a mortar which can be applied before the initial setting time.

### **APPLICATION:**

1. Mould the mortar by gloved hand for a few seconds into a plug.

2. Apply immediately into the prepared void pressing firmly until the mortar has set.

3. Remove excess material from the substrate by scraping it away with a spatula or trowel after the sealing is complete.

4. In case part of putty is washed away due to water pressure, repeat the application till leakage stops fully.

5. In case of excessive water pressure, drill holes around main leakage point to reduce water pressure and attack main leakage point first and subsequently seal/patch other drill holes.

6. Depending on the setting time, a wet sponge can be used to smooth the surface of the plug.



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## Low Temperature working

In cold conditions down to 1°C, the use of warm water (up to 20°C) is advisable to accelerate strength development. Normal precautions for winter working with cementitious materials should be adopted. The material should not be applied when the substrate and/or air temperature is 1°C and falling. At 1°C static temperature or at 1°C and rising, the application may proceed.

## High Temperature working

At ambient temperatures above  $35^{\circ}$ C, the material should be stored in the shade and cooler water (down to  $20^{\circ}$ C) used for mixing.

## Limitations

PLUGCON should not be used when the temperature is below 1°C and falling. If any doubts arise concerning application or substrate conditions, consult the local FCSC office.

### Packaging

PLUGCON is supplied in 25 Kg

## Storage and Shelf life

Frost free, protected against the weathering, 6 months in original unopened pack

## Cleaning

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed

### Safety precautions

User must read Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

### Note

All Technical Data Sheets of FIRSTCHOICE SPECIALITY CHEMICALS are updated on regular basis; it is the user's responsibility, to obtain the most recent issue. Field services where provided, does not constitute supervisory responsibility, for additional information contact our local representative.

## Disclaimer

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