

# PIOREP MC

High performance cement based self-compacted shrinkage compensated micro-concrete

## DESCRIPTION

**PIOREP MC** is a high performance, high strength, non-oxidized, non-shrink flowable mortar. **PIOREP MC** contains selected Portland cements, selected hard aggregate, shrinkage compensating materials and modifiers that permits to be applied in a thickness more than 30 cm up to 3 meters height without any problems.

## USAGES

- Anchor bolts and grouting beneath bridge bearing.
- Structural elements such as precast wall, beam columns, etc.
- Crane rails, milling machines, heavy anchor bases, and base plates for reciprocating machines
- Generators & turbines
- All Similar works

## TECHNICAL DATA

### PIOREP MC

### Typical values

Compressive Strength  
Day 3  
Day 7  
Day 28

23 N/ mm<sup>2</sup>  
35 N/ mm<sup>2</sup>  
45 N/ mm<sup>2</sup>

Specific Gravity (Wet)

2.0 – 2.1

Flexural Strength

14 N/mm<sup>2</sup>

Pot Life

50 min

Thickness Range

30 cm – 3 m

Expansion after 28 days

0.03%

Setting Time (I-F)

4 – 6 hours

## STANDARDS

**PIOREP MC** is formulated to comply with all requirements of ASTM C-1107, Packed dry, Hydraulic – cement grout (Non-shrink) Grade C as well as CRD C-621.

## ADVANTAGES

- Requires only addition of water on site at application time
- Non-Oxidized, non-shrink, non-sag, chloride & nitrate free
- Compatible with all physical properties of concrete
- High mechanical & High heat resistance properties
- Minimizes chemical attack over concrete
- Low permeability ensuring durability
- Non-toxic and does not contain any harmful ingredient
- Adjustable consistency
- Formulated for the Middle East climate

## USAGE INSTRUCTIONS

### 1. Surface preparation

All substrates shall be sound, clean, free from dust, grease & oil, dirt, the concrete substrates shall be saturated with water prior to application.

### 2. Mixing

**PIOREP MC** shall be thoroughly mixed using mechanical mixing procedures, mechanical mixing using spiral paddle in a slow speed (400-500 rpm), heavy duty electric drill is recommended.

Put 3 - 3.5 liters of clean water – for full 25kg bag- in the mixing vessel and start mixing while adding the powder gradually and continue mixing till homogenous free from lumps mortar is obtained.

### PIOREP MC

### Liters

Water/25 kg bag

3 – 3.5

Yield (liters)

13

### 3. Application

Apply the mixed materials during the open time onto the required area of patching using gloved hands or trowel. Mixed mortar should be applied using firm pressure to fully compact the mortar and ensure good adhesion with the steel reinforcements and the substrate. finishing and leveling should be carried out initially by wooden or plastic float.

### 4. Curing

**PIOREP MC** is a cement-based material, that should be cured properly by spraying water for 3 days.

Using **ENECURE WB** curing compound is recommended.

## PACKAGING

**PIOREP MC** is supplied in 25 kg bags.

## HEALTH & SAFETY

**PIOREP MC** Is non-toxic, non-hazardous, if material comes in contact with skin, cleaning with water and soap is recommended.

For Ecology: Do not dispose directly to water or soil, re-use it if possible or mix with water and wait until it hardens then bury it in landfill in accordance with national regulation.

## STORAGE & SHELF LIFE

**PIOREP MC** shall be stored in normal conditions away from extreme temperatures, and any source of moisture. Shelf life is 12 months.

### TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:  
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