



Technical Data Sheet

Description

Tek-Crete MC is a single component high strength cementitious free flowing micro concrete formulated from selected cements, sand, admixtures and aggregates. It can be used at a wide range of repairs. When used as a fluid micro concrete it is self-compacting. It is resistance to chloride ingress, carbonation, freeze thaw attack and sulfate attack.

Advantages

- High early strength
- Single component
- Self-compacting
- Freeze/thaw resistance
- Non-shrink
- Low permeability
- Free-flowing

Uses

- As a concrete, where reinforcement is congested
- Large tact structural repairs
- Repairs of:
 - Parking buildings
 - Potable & waste water tanks
 - Tunnels, dams, bridges and marine structures

Physical Properties*

PROPERTY	TYPICAL RESULTS
Compressive strength	>75 MPa @ 28 days
Flexural Strength	>14 MPa @ 28 days
Bulk density	2.2
Flow	10 to 35 seconds
Permeability	<10mm
Chloride content	<0.1% by weight
Bond strength	Greater than concrete tensile strength
*The above properties are average laboratory values	

Packing

Tek-Crete MC is available in 25 kg and 50 kg bag.

Theoretical Coverage/yield

Approximately 12 liters when mixed with 3.2-3.5 liters of clean water for 25 kg bag.

Shelf Life

12 months when stored in factory packed unopened bag, stored in a cool dry and elevated place away from direct sunlight.

Installation Guidelines

Spraytek provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting the work. The information below is a summary intended for guidance only.

Surface Preparation

Concrete substrate must be structurally sound. Loose or unsound concrete should be removed. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The substrate must be prepared to create a 'key' for bonding.

The substrate must be primed using clean water to achieve a saturated surface dry prior to application.

Protection of reinforcement steel bars

Remove all corrosion deposits from the exposed reinforcement steel bars.

For protection against corrosion, coat the reinforcement steel bars with **Tek-Prime ZR**.

Priming

The substrate must be primed using clean water and not allowed to dry out, prior to application.

Mixing

Tek-Crete MC is supplied as a single component cementitious product. Pour 3.2 to 3.5 liter of clean water into suitable clean container and slowly add the product while mixing with low speed drill (300-500 rpm) with

mixing paddle. Mix approximately for 3-5 minutes to achieve right smooth consistency.

Application

The shuttering/formwork should in place and completely sealed to avoid any material loss.

Apply **Tek-Release UR** or **Tek-Release WB** release agents to enable easy taking away of shuttering/formwork after casting and full cure.

Prior to pouring the **Tek-Crete MC**, shuttered/formwork substrate areas should be soaked and filled with clean water. If, this cannot be filled, the substrate must be completely sprayed with clean water. Make sure to drain out the filled water and seal the drains completely leaving the substrate in a damp condition, before pouring the mixed material.

The mixed material should be placed within 30 minutes. The mixed product can pour or pumped into the formwork. No vibration required.
Repair thickness from 10mm to 120mm.

Curing

Curing shall be done by **Tek-Cure AR** or **Tek-Cure WB** or by wet hessian; the repaired areas should be wrapped immediately with high density polythene sheet.

Precautions

Do not add additional water or re-temper the mix.

Ensure the temperature of the mortar does not exceed 35°C at the time of mixing.

Do not mix by hand.

Do not part mix, use full bag.

Do not apply in rain or wet conditions or at temperature below 5°C.

Do not expose to running water until the product is fully cured for 7 days.

Technical Support

Spraytek offers full technical support package to specifiers, contractors and end users, as well as technical assistance on site and after sales consultations.

Health & Safety

As with all chemical products, caution should always be exercised. Protective clothing, such as gloves and goggles, should be worn. See packaging/MSDS for specific instructions.

Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

Reference #	TDS / STC / TCMC
Issue Date:	06/2012
Revision #	1

The information contained herein is to the best of our knowledge, belief, and accuracy. However, hence the conditions of handling and usage beyond our control. We make no warrantee of results, and assume no responsibility or liability for any damages or consequential damage incurred by the use of the product. Our products are sold on the condition that the user shall evaluate them, as well as our recommendations. To determine their suitability for a particular purpose. The user is solely responsible for the selection of Spraytek products.



Spraytek Coatings LLC

P.O. Box 27356, Dubai, U.A.E., Tel.: +9714 2221432, Fax: +9714 2275750, Email: info@spraytek.ae

www.spraytek-me.com