

# **Technical Data Sheet**



### **Description**

**Tek- Crete EMH** is a high strength epoxy lining mortar for the restoration of manhole benching. It can be used as a lining mortar in chemically aggressive situations.

### **Advantages**

- High early strength
- Abrasion resistance
- Compatible with concrete
- Can be applied to steel
- Easy to finish
- Chemical resistant
- Impermeable

#### Uses

- Manhole benching
- Old and worn concrete
- Offshore and marine environment

#### **Physical Properties\***

Property	Typical Results
Solid content by weight	100%
Compressive Strength	>80 MPa
Tensile Strength	>15 MPa
Flexural Strength	>25 MPa
Application Temp	5°C – 35°C
Initial Hardness	6–12Hr
Pot Life @ 25 Deg C	60 Min
*The above properties are average laboratory values	

### **Standards Compliance**

ASTM C 109, ASTM D 638, ASTM C 580

### **Packing**

**Tek-Crete EMH** is available in 16 kg. pack of part A, B and C.

## **Theoritical Coverage Rate**

1 m<sup>2</sup>@ 8 mm thickness per pack Actual coverage depends on wastage & surface profile

#### **Shelf Life**

12 months when stored in cool dry environment in factory packed unopened containers between  $5^{\circ}\text{C} - 25^{\circ}\text{C}$ .

#### **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 by shot blasting or water blasting or by manual methods. Remove all rust from the rebar, if any, and immediately apply **Tek-Prime ZR** onto the full surface of the rebar and allow to dry.

# **Priming**

The prepared surface should be primed with **Tek Bond EP**. The contents of the hardener should be emptied into the base component and stirred with a spatula until the product appears uniform. The mixed primer should be applied by a stiff brush at 10m<sup>2</sup> per liter. Allow the primer to become tacky free prior to the application of mortar. If the primer appears to absorb into the surface easily, it will be necessary to apply a second coat once the initial coat is tack free.

### **Mixing**

**Tek-Crete EMH** comes in a 3-component ready to mix pack. Under no circumstance should part mixing be allowed. First mix the two liquid components (A & B) for 3 minutes, then transfer to a clean suitable mixing container. Add part C slowly while simultaneously mixing with a slow speed drill fitted with a paddle, mix for 5 minutes until a uniform consistency and all fillers are coated. Apply immediately.

### **Application**

Apply to the tacky primed surface using a steel trowel or by gloved hand and press firmly on position. On vertical surfaces, build up in layers, scratching each layer and allowing it to cure before applying the next layer. Each new layer should be primed. Trowel smooth finish with a steel float and a small amount of solvent. Where a more textured finish is required use a plastic or wodden float.

### **Cleaning**

All tools shall be cleaned with solvent as per Spraytek recommendation immediately after use. Hardened materials can be removed mechanically only.

#### **Precautions**

Do not add any thinner or solvent.

Do not apply in wet conditions or at temperature below 3°C of the dew point.

Do not dispose into water drains.

### **Technical Support**

Spraytek offers full technical support package to specifies, 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.

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