

# **Technical Data Sheet**



# **Description**

**Tek-Coat CR** is a two component solvent-free high performance ceramic enhanced, high build epoxy coating. It is designed to provide high abrasion resistance and protection against chemical attack. These superior properties are further enhanced by the availability of a wide range of high & semi –gloss colours for aesthetics.

### **Advantages**

- Moisture insensitive
- Solvent-free coating
- High abrasion resistance
- Resistance to wide range of chemicals
- Non-toxic
- Available in range of standard colors
- Suitable for areas in direct contact with drinking water.

### Uses

- Coating of concrete tanks for portable water.
- Marine maintenance including splash zone, structural steel, steel pilings, concrete foundation etc
- Industrial applications in steel culverts, water works and sewage, steel pipes, manholes and tanks subject to alternate or constant water immersion.

### **Physical Properties\***

Property	Typical Results
Compressive strength (BS 6319)	>70 MPa – at 28 days
Flexural Strength (BS 6319)	>42 MPa – at 28 days
Tensile strength (ASTM D 638)	22 MPa
Abrasion resistance (ASTM 4060, CS17 wheel)	76.1mg loss/1000 cycles
Impact resistance	No cracking
Bond strength to concrete	Greater then cohesive strength of concrete
*The above properties are average laboratory values	

### **Application Properties**

Dry film thickness	Two coats of 200 microns DFT each coat
Pot life	60 minutes at 25°C
Touch dry	6 hours at 25°C 4 hours at 35°C
Minimum overcoat time	4 to 6 hours
Maximum overcoat time	24 hours
Light foot traffic	18 to 24 hours
Full cure	7 days (exposure to chemicals)

# **Volatile Organic Content**

VOC < 10q/L

### **Fire performance**

BS 476 Part 7: Class 1 surface spread of flame

#### **Food Contact**

Meets USDA requirements for incidental food contact.

#### **Chemical resistance**

Hydrochloric acid, 30%: excellent Nitric acid, 20%: good Acetic acid, 10%: very good Sulphuric acid, 40%: excellent Sodium hydroxide, 50%: excellent

Kerosene: excellent Ketones: non resistant

Alcohol: good Skydrol: excellent Petrol: excellent

(For chemicals not listed, please consult Spraytek)

# **Packing**

**Tek-Coat CR** is available in 4 lt & 15 lt packs.

### **Theoretical Coverage**

5.0 square meters per litre at 200 microns WFT / DFT (2 coats recommended at above thickness)

#### **Shelf Life**

12 months when stored in cool dry environment in factory packed unopened containers.

#### **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 sand blasting. Any blow holes should be filled with **Tek-Crete EFC**. The moisture content of the concrete substrate should be less than 7%.

### **Priming**

The substrate must be primed using **Tek-Prime SF** primer and allow to dry, prior to application of **Tek-Coat CR**. Ensure that no ponding of the primer during the application and applied to appropriate thickness and it is not applied too thick. If the primed surfaces left to dry for more than 24 hours the surfaces has to be re-primed.

If the concrete substrates are too porous, then it is recommended to use multiple coats of **Tek-Prime SF** to seal of the surfaces.

#### **Mixing**

**Tek-Coat CR** is supplied as a two component epoxy resin product. Add 'Part B' to the 'Part A' into suitable clean container and slowly mix with low speed drill (300-500 rpm) with mixing paddle. Mix approximately for 3-5 minutes to achieve streak free consistency. Improper mixing will result in a soft or tacky / uncured surface. DO NOT add thinner or any solvents.

#### **Application**

Apply in two coats of 200 microns per coat WFT using medium pile roller. Recoat if necessary after 4 to 16 hours at 35°C.

#### **Precautions**

Do not add any thinner or solvent.

Do not mix by hand.

Do not part mix, use full pack.

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

Do not over mix the product.

Do not dispose into water drains.

### **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.

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