T- GUARD® CR

THERMAX

Chemical Resistant, Quick Cure Resin Based Protective Coating for Concrete

T- GUARD[®] CR is a three component (Component A-Resin, Component B- Catalyst and Component C-Promoter) resin based protective coat for use in corrosive environments exposed to highly reactive chemicals.

Uses

T- GUARD[®] CR is suitable to be used in the following conditions.

- As a top coat exposed to corrosive environment
- As an additional protective coating with Maxtreat[®]
 Fibrenet System.
- As a protective coat on concrete for chemicals and chemical fumes.
- On metal and concrete substrates

Benefits

- Excellent Chemical Resistance
- Low Viscosity for Easy Application
- High Strength Gain from Fats Curing
- Abrasion Resistant
- High Wear Resistance

Technical Support

Thermax provides a technical advisory service for onsite assistance and advice on admixture selection, evaluation trials and dispensing equipment.

Properties

Appearance	Clear	Pale	Yellow
	Liquid		
Specific Gravity at 25°C	1.06±0.02		
Viscosity at 25°C	300-400 cps		
Volatile Content, %	40±2		
Gel Time at 25°C*	30-60 minutes		

*Gel time is measured with 100gms of Comp A, 1phr of Comp B and 0.3phr of Comp C. This time might vary with temperature and the amount of Comp B and C used.

Tensile Strength, ASTM D 638	>70 MPa
Tensile Modulus, ASTM D 638	>3 GPa
Flexural Strength, ASTM D 790	>30 MPa
Flexural Modulus, ASTM D 790	>3 GPa

Component and Mixing Data:

Property	Comp A	Comp B	Comp C	Mixed
State	Liquid	Liquid	Liquid	Liquid
Mixing Ratio	100	1	0.3	-
Application Thickness	-	-	-	<3mm

Chemical Resistance

Thermax recommends exposure up to 80°C with 40% H₂SO₄ and 40% H₂PO₄.

Instructions for Use

Surface Preparation

Thorough surface preparation is vital. All surfaces to be treated must be cleaned by a wire brush or other mechanical means for removing all dust. The surface must be free from oil, grease, wax or any other form of foreign matter which may affect adhesion. Damaged concrete or plaster must be removed for sound substrate and repaired accordingly before coating. All the pinholes and surface undulations must be covered with T-GUARD® EPG.

The surface residual moisture must be less than 4%. T- GUARD[®] CR must not be applied on substrates with rising dampness.

Mixing Ratio

Add 0.3phr of Component C to 100 gms of Component A. Follow this with the addition of 1phr of Component B and mix thoroughly until a homogenous mix is obtained.

Application

Over the applied Maxtreat® Fibrenet System, apply the mixed T- GUARD® CR in a continuous film in the recommended thickness. Apply T- GUARD® CR into the surface using a trowel or roller. Apply the reinforcement fabric, taking care to arrange the fibers taut and wrinkle free while protect hands with waterproof gloves. Roll the surface with spiked rollers ensuring the proper impregnation. To incorporate the reinforcement, apply a second coat of T-Guard® CR and complete the saturation of the reinforcement.

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Alternatively, spray application of the system with reinforcement can be done. Thermax recommends spray application for a hassle free application process.

Recommended application thickness is 3mm which is not to be exceeded. Granulated quartz sand (0.7-1.2mm) must be sprinkled over the final coat for applications where plastering or further building systems are expected.

Health & Safety Instructions

T- GUARD[®] CR should not come into contact with skin and eyes or be swallowed.

Some people are sensitive to resins, hardeners and solvents. Gloves, goggles and barrier creams should therefore be used while handing the product. Adequate ventilation should be ensured and if working is in enclosed areas, suitable breathing apparatus must be used. If the resin comes in contact with skin, it must be removed before it hardens with a resin removing cream, followed by washing with soap and water. Solvent should not be used. Should accidental eye contamination occur with any of the above products, it should be washed well with plenty of water and medical advice should be sought.

Cleaning

All tools and equipment should be cleaned with solution immediately after use. Spillages should be absorbed with sand or sawdust and disposed in accordance with local regulations.

Storage

T- GUARD[®] CR must be stored in a cool dry place away from direct sunlight. Storage temperature must not exceed 25°C.

Shelf Life

T- GUARD® CR has a shelf life of 3 months when stored in unopened containers under normal warehouse conditions. After 3 months, the quality is subject to reevaluation.

Coverage

Approximately 0.9kg (A+B+C) per sqm with 0.3kg of reinforcement fabric @ 0.5-0.5mm thickness.

Packing

Component A (Resin): 35 kg Component B (Catalyst): 350 mL Component C (Promoter): 105 mL

Other Segments:

- Concrete Admixtures
 Surface Treatments
 Grouts & Anchors
 Repair & Rehabilitation
- Protective Coatings Industrial Flooring Waterproofing Sealants Adhesives

Disclaimer: The information contained in this document is true and accurate to the best of our knowledge and is based on our experience & test results. It is always the Company's endeavor to give true and accurate information however as it does not have any direct and/or continuing control on the use of the Products, the Company cannot accept any liability, direct or indirect as a consequence of the use of Products. In the event of any doubt upon any critical parameter it is advisable to seek clarification from our technical representative.



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