TECHNICAL DATA SHEET



SOLIDGUARD HCP

26 July 2021; Rev 4

SOLIDGUARD HCP

Chemical Resistant Epoxy Lining Resin

Solidguard HCP is an extremely chemical resistant select blend of Bisphenol-A resin and high cross-linking activator that is specifically formulated for demanding acid or highly alkaline environments. Also excellent use in petroleum storage tanks. It is applied as a roller coat on steel tanks or in combination with glass fiber reinforcing membrane and chemical resistant C-glass veil for optimum chemical resistance. Ideal for tanks exposed to extreme conditions in the pulp and paper industry, sugar industry, petroleum industry, acid processing plants and tank farms.

BENEFITS:



Excellent chemical resistance to a wide variety of corrosive environments.



High mechanical properties. Extremely tough and crack resistant.



Excellent scratch and mar resistance.

Easy to clean.



Low odour.



Thermal shock resistant.



Chemical resistant to 50% sulphuric acid, 20% HCL, 5% acetic acid, 30% sodium hydroxide.

TECHNICAL DETAILS				
Application	Roller			
Profile	Smooth			
Typical Laminate Properties				
Finish	Gloss			
Glass Content	33% (2 x 450 GSM glass cloth)			
Application Temperature	5 - 30 °C			
Tensile Strength	> 125 MPa ISO527-1993			
Service Temperature	110 °C max dry			
Tensile Modulus	7800 MPa			
Flexural Strength	> 200 MPa ISO178-2001			
Colour	Various Standard			
Walk on Time	12 hrs at 20 °C			
Full Cure	3 days			
System Details				
Primer	Solidkote STP Primer			
Top Coat	Solidguard HCP			
Lamination (With glass cloth)				
Laminate	1 - 3 mm system DFT			
Metal Coating (Without glass cloth)				
Primer 200 um DFT	5 m ² / L			
Top Coat 250 um DFT	4 m² / L			



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APPLICATIONS

- Ideal for protection of concrete tanks, equipment bases, floors and drains against aggressive chemicals.
- Tank farms and chemical storage tanks.
- Acid bunds, tank linings.
- Chemical loading bays.

SUBSTRATE REQUIREMENTS

- Surfaces to be coated must be clean and free of dust, oily residues and loose friable material.
- All surfaces to be suitably prepared using grinders, shot blasting or scarifiers to remove laitance.
- Substrate must be a concrete screed Grade 2 evenness and must be a minimum of 20 MPa compressive strength, with a tensile pull off exceeding 1.5 MPa.
- The substrate should be dry to 75% RH (BS 8204) and free from rising damp or ground water pressure.

MIXING

- Materials are supplied as 2 components -Resin Part A and Hardener Part B.
- Mix ratio is 1.5:5 (M/M)
- Add components together and mechanically mix for 2 minutes.
- Use within 60 minutes.
- Do not attempt to split kits.

BRUSH / ROLLER

- Thin the product between 5-15% as needed.
- Use short mohair roller for best finish and build.
- Thinner: Solidkote 505 Epoxy Thinner.

AIRLESS SPRAY

- Recommended for large applications.
- Conventional pressure pot equipment may also be used but must be tested to access suitability.
- Thinner: Solidkote 505 Epoxy Thinner
- Nozzle Orifice: 0.5mm
- Nozzle Pressure: 12-16MPa (120-160bar, 1740-2321 psi)

Tel: +27 11 822 7242

- Spray the Solidguard HCP onto the prepared surface to achieve a minimum film thickness of 300 um in two coats.
- To achieve greater thicknesses allow the product to cure before applying subsequent coats.

To give specified protection, a minimum of two coats should be applied.

CLEANING SOLVENT

Solidkote 505 Epoxy Thinner

OVERCOATING TABLE

Surface should be dry and free of any contamination. Solidguard HCP at 250 um.

Substrate Temperature	5 °C	15 °C	25 °C	35 °C
Min Intervals (with itself)	12 hrs	10 hrs	6 hrs	4 hrs
Solidguard PUR	16 hrs	12 hrs	8 hrs	6 hrs
Max Interval	7 Days			

HEALTH AND SAFETY:

The system contains styrene and all appropriate PPE must be worn. Please consult Health and Safety Data sheets for each product.

Please read Safety Data Sheet and specific health and safety data for this product provided in compliance with the requirements of OHSA No.85 of 1993. The finished system is not hazardous to health or the environment.

WARRANTY

Technical Finishes products are manufactured under high quality standards and are warranted against defective materials and are sold subject to standard Terms and Conditions of Sale, copies of which can be obtained upon request. Technical Finishes deals with approved applicators and carry a back to back warranty with these clients. Technical Finishes cannot be held responsible for the workmanship in surface preparation and application of our products, it is understood that the approved contractor will quarantee such workmanship and application. It is vital that the application is done in accordance to our specification.

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