

# DATA SHEET

## EPO100HCR

High Chemical Resistance Hardener



ALL PURPOSE COATINGS

### Description

EPO100HCR Hardener is a severe service coating, high-build, 100% solids high chemical resistance epoxy coating. It provides resistance to harsh chemicals where a high-end, extremely resilient coating is required.

EPO100HCR coatings are characterised by their fast cure, excellent adhesion, outstanding chemical resistance and demonstrate excellent curing properties even at low temperatures (5°C).

### Recommended Uses

- Commercial Kitchens and Food Processing Plants
- Chemical-Resistant Industrial Flooring
- Mechanical Workshops and Warehouses
- Factories and Production Areas
- Primary Containment of Water and Wastewater
- Secondary Containment of many chemicals
- Walls, Floors, Gutters and Troughs
- Manholes, Wet Wells and Lift Stations
- Wastewater and Metal Treatment Plants
- Pulp and Paper Mills
- Power Stations
- Plastics Industry
- Laboratories
- Battery Storage Areas

### Features & Benefits

- Hard Wearing and Durable
- Low Maintenance
- Excellent Chemical Resistance to a Wide Range of Industrial Chemicals
- 100% Solids System, Solvent Free
- Liquid Applied to Seamless Protection of Concrete
- Usable with Aggregate Broadcast Creating Slip-Resistance
- Higher Heat Resistance than Standard Epoxies.
- Food Contact Safe

### Product Information

<b>Pot Life</b>	30-45 minutes at 25°C.
<b>Shelf Life</b>	2 years. Store in a cool, dry area and out of direct sunlight
<b>Mixing Ratio – EPO100T</b>	(3:1) 2 Parts EPO100TA (Part A):1 Part EPO100HCRH (Part B)
<b>Coverage</b>	3-6m <sup>2</sup> /L depending on the method of application and porosity of the surface.
<b>Heat Resistance</b>	Epoxy will not begin to soften until 90°C.
<b>Clean Up</b>	Clean tools with 150 Epoxy Thinners while still wet and discard rollers & brushes
<b>Return to Service</b>	<b>Light Foot Traffic:</b> 24 Hours after completion of the job. <b>Vehicle Traffic:</b> 24-48 hours after the completion of the job. <b>Sure Hardness:</b> 72 hours after the completion of the job. <b>Full Chemical Cure:</b> 7 days after the completion of the job.
<b>Recoat Time</b>	12-24 hours depending on the temperature.

### Physical Properties

<b>Solids content</b>	100 %	<b>Heat Distortion Temperature</b>	ASTM D648: 50°C
<b>Finish</b>	Gloss	<b>Bond Strength to Concrete</b>	100% Concrete failure
<b>Impact Strength</b>	High	<b>Resistance to Chemical Spills (7 days at 25°C)</b>	
<b>Compressive Strength</b>	ASTM D695: 12,000 psi	Hydrochloric Acid: 50% Regular contact	
<b>Tensile Strength</b>	ASTM D638: 3,900 psi	Nitric Acid: 25% Occasional contact	
<b>Elongation at Break</b>	ASTM D638: 7.00%	Sulfuric Acid:50% Regular contact	
<b>Taber Abrasion Resistance</b>	ASTM D4060: < 0.1g loss	Phosphoric Acid:50% Regular contact	
(mg or loss/1000 cycles) CS-17-wheel, 1 kg load		Acetic Acid: 10% Regular contact	
<b>Water Absorption</b>	ASTM D570: 0/07% (2-hour boil)	Sodium Hydroxide: 50% Regular contact	
<b>Flexural Strength</b>	ASTM D790: 7,800 psi	Ammonia: 10% Regular contact	
<b>Shore D Hardness</b>	ASTM D2240: 89	Bleach: 5% Regular contact	
		Bleach Concentrate: Regular contact	
		Urea (saturated): Regular contact	

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### Physical Properties Continued

#### Resistance to Chemical Spills (7 days at 25°C)

Sugar (saturated): Regular contact  
Sodium chloride (saturated): Regular contact  
Methanol: Regular contact  
Butanol: Regular contact  
Acetone: Occasional contact  
Mineral Spirits: Regular contact  
Xylene: Regular contact  
Lubrication Oil: Regular contact  
Gasoline: Regular contact  
Skydrol: Regular contact

### Surface Preparation

Diamond Grind or Polyvac the substrate. Surfaces must be clean, dry and free from all traces of loose material, old coatings, curing compounds, release agents, laitance, oil and greases etc. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa and moisture content below 4%. Alternatively use EPO100MTH Moisture and Metal Tolerant Hardener.

Structurally unsound layers and surface contaminants must be mechanically removed by grinding or other methods. Substrates heavily impregnated with oil must be cleaned by grinding or suitable solvent cleaning methods. To check that all traces of oil have been completely removed, sprinkle a few drops of water over the surface. If all water is quickly absorbed, the surface is sufficiently oil and grease free. Cleaning methods are to be repeated if the water is pooling on the surface.

Repair and fill cracks with EPO100EP Epoxy Putty or Concrete Repair Kit.

### Cautions

- Avoid contact with heat and naked flame.
- Avoid contact with skin and eyes. Use full PPE during application including but not limited to, gloves, mask and goggles.
- Provide adequate ventilation when using in confined spaces.
- Thoroughly mix Part A and Part B using a powered drill with a paint mixing attachment for 2 minutes. Ensure that all materials on the sides and on the mixer are combined thoroughly to avoid hot spots in the coating that may never cure on application.
- The mix ratio is calculated by product volume. **NOT BY PRODUCT WEIGHT.** Mixing product by weight may result in an unsatisfactory cure time or failure of the mix to cure entirely.

*In an emergency, contact the Poisons Information Centre on 13 11 26 or a doctor for advice. IF THE SITUATION IS LIFE THREATENING, DIAL 000 IMMEDIATELY.*

*DISCLAIMER: Please ensure you read the SDS & TDS thoroughly & carefully before the use or application of any All Purpose Coatings product. These documents contain information in context to how you will apply the product, including if it is being used in conjunction with any other products or systems, and to what surface the product will be applied. All Purpose Coatings Pty Ltd does not accept any liability either directly or indirectly for any losses that arise from the use or application of the product in accordance with any advice, specification & recommendation given by the companies' documentation or representatives at any point in time. Application, performance & safety data may change from time to time. It is the user and/or applicators responsibility to ensure they have the latest copy of any documentation pertaining to their project.*