



TECHNICAL DATA SHEET

Commercial • Industrial • Residential

PROTECH High Performance Finishes

PRE-CATALYZED EPOXY

INTERIOR WATERBORNE SATIN/EGGSHELL (4390 Series)

INTERIOR WATERBORNE SEMIGLOSS (4490 Series)

DESCRIPTION

This high performance Pre-Catalyzed Epoxy is a "single component" waterborne acrylic epoxy for interior applications, which offers **premium adhesion** properties for multiple surfaces and **excellent durability and abrasion resistance** similar to two component epoxy systems. It provides **superior resistance** to a variety of **stains** and a broad range of **chemicals**. This product is formulated with **excellent washability and scrub-ability** while balancing **flexibility** and **hardness** with excellent film formation down to 50°F.

INTENDED USE:

- This product is **designed** to be applied over **many substrates** including metals, fiberglass, wood, masonry, plaster and drywall.
- It is **suitable for** Institutional High Performance protection, USDA inspected surfaces, along with ornamental steel, maintenance areas, kitchens, dining areas, schools, hospitals or where durability and high performance properties are required.

COATING PROPERTIES

Coating Category	Waterborne Acrylic Epoxy
Package Size	Available in one gallon and five gallon pails.
Mix Ratio	N/A – <u>Single Component</u> 1K
Viscosity (Mixed) - KU	100 – 110 KU's
Recommended Film Thickness (per coat):	
Wet Film	4.0 – 6.0 mils
Dry Film	1.4 – 2.0 mils

TEST RESULTS

Substrate: Steel	
Surface Preparation: SSPC-SP6	
Coating: PROTECH PRE-CATALYZED EPOXY (Satin/Eggshell and Semi-Gloss)	
Cure Time: 7 Days	
Adhesion (Crosshatch; Aluminum/Steel): Method: ASTM D3359 – Method B Result: 4B – 5B (Excellent) Depending on Substrate 100% Adhesion for light colors; Darker colors require longer cure time for same level of adhesion	Pencil Hardness: Method: ASTM D3363 Result: H
Impact Resistance: Method: ASTM D2794 (Direct/Reverse) Result: 100 – 120psi; 120 in-lbs.	Hardness Development: Method: ASTM D4366 Result: 20 – 25 With "Konig Pendulum" oscillations
Abrasive Scrub Resistance: Method: ASTM D2486 Result: 800-900 Cycles With Pumice Scrub Media and Stiff Bristle Brush	Block Resistance: Result: Excellent
Flexibility: Method: ASTM D522 (1/8" Mandrel) Result: Pass (1/4" bend)	Chemical Resistance: Method: ASTM 1308 Result: Excellent ^
Sag Resistance: Result: 6+ mils	Stain Resistance: Method: ASTM D3023 Result: Excellent ^ ^ Panel of 27 chemicals and 13 stains evaluated
Mildew & Mold Resistant: This coating contains a Biocide and Mildewcide package which inhibits the growth of fungi, mildew and mold on the surface of this coating film.	

CERTIFICATIONS:

MPI Approvals – #139, 141, 151 and 153

MARKETS / END-USES:

- Storage Tank Exteriors
- Structural Steel
- Plant Maintenance
- Ornamental Steel
- Dry Goods Containers
- HVI Maintenance
- Healthcare
- Education
- OEM
- Food Processing
- Commercial Kitchens

SUBSTRATES:

- Pre-Painted Surfaces
- Concrete / Masonry
- Ferrous Metals
- Non-Ferrous Metals
- Fiberglass
- Wood
- Gypsum Wallboard

PRODUCT WEIGHT:

10.90 lb. per gallon

GLOSS LEVEL:

Satin/Eggshell = GL3
Semi-Gloss = GL5

VOC INFORMATION:

Bases **VOCs (g/L)**

SATIN/EGGSHELL < 50 g/L*

- 439001 – White Base
- 439003 – Deep Base
- 439004 – Neutral Base

SEMIGLOSS < 50 g/L*

- 449001 – White Base
- 449003 – Deep Base
- 449004 – Neutral Base

* Without Tint colorant.

Tinting with industrial waterborne colorants will change the VOC

TINT COLORANT TYPE:

Water Base 896 Industrial Tinting Colorants

TINT LOAD CAPACITY:

Check with your Rodda Paint Store or Sales Representative for tinting information



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Formulated and Manufactured in Portland, Oregon, USA

Page 1 of 4
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COVERAGE INFORMATION

Mixed Volume Solids (May vary by Base & Color)	34% +/- 2%	
Theoretical Coverage	272 square feet per gallon at 2 mils dry film thickness Note: Actual coverage may vary depending on substrate, application methods, and specified dry film thickness	
Applied Coverage	200-400 Sq. ft. /gal - Actual coverage will vary depending on substrate and application method Please contact your Sales Representative for specific project recommendations	
Pot Life (at 50% RH)	Not applicable, this is <u>single component</u> product	
Shelf Life & Storage	Maximum Shelf Life of 3 years when stored in unopened containers. Store indoors at 40-90F. Keep from freezing! Subject to re-inspection.	
Induction Time	None required	
Finish:	Satin/Eggshell	Semi-Gloss
Gloss Sheen	15 – 20 @ 60°, GL 3 25-35 @ 85°	40 – 50 @ 60°, GL 5 60 – 70 @ 85°

APPLICATION PARAMETERS

Relative Humidity Restrictions	Do not exceed 85% during application or curing phase
Minimum Application Temperature	50°F (substrate)
Maximum Application Temperature	110°F (substrate)
Service Temperature (Continuous):	180°F (substrate)
Service Temperature: (Intermittent):	220°F (substrate)
Application & Curing Information	<u>At 70°F and 50% Relative Humidity:</u> Dry to touch : 1 hour Dry to recoat : 4 hours Dry hard : 7-14 days Note: Film thickness will affect dry/cure times
Technical Notes	<ul style="list-style-type: none"> This coating is Not Formulated for Immersion Service or a Continuous High Moisture Environment Do not apply when the relative humidity is above 85% or when a surface will be subjected to temperature below 50°F. Ensure enclosed areas are adequately ventilated during curing phase to prevent excessive humidity build up which can affect sag resistance or cure Superior performance will result from priming with a rust inhibitive primer on ferrous metal surfaces This coating is Not Recommended For Floors

COATING RECOMMENDATION:

One or two coats recommended over properly prepared surfaces

MIXING:

Mix thoroughly and slowly to not introduce air into product

THINNING/REDUCERS:

- Can be thinned with up to 5% clean/potable tap water
- In hot environments it may be necessary to add 913 Latex Reducer Additive to the paint to improve workability – 4 to 8 fluid ounces per gallon should be considered

• Use least amount of additive to provide desired workability

NOTE: Excessive reduction with water can cause flash rusting on steel and reduce sag resistance during application

APPLICATOR INFORMATION:

BRUSH:

Use a Nylon/Polyester brush

ROLLER COVER:

Use a 1/4" – 1/2" nap synthetic cover depending on the degree of texture of the surface to be painted

AIRLESS SPRAY:

Pressure 2,000 psi

Tip: .013 to .019

EQUIPMENT CLEANING:

- Clean application tools immediately after use with warm soapy water
- Partially dry or dry films may require solvent cleaning with a Synthetic Reducer





SUBSTRATES AND SURFACE PREPARATION

SURFACE PREPARATION IS IMPORTANT - All surfaces must be of uniform porosity, clean, dry and free of mildew, grease, chalk, soap film, sanding dust or other contaminants

- Remove all loose or peeling material from previously painted surfaces
- Wash with a mild detergent and water solution. Rinse thoroughly, allow to dry
- On glossy or smooth surfaces, scuff sand using appropriate sandpaper to provide a uniformly dulled appearance
- Remove all sanding dust prior to painting
- Do not apply at ambient or substrate temperatures below 50°F (10°C)

FERROUS METAL:

- Clean metal of any contaminants by pressure washing or solvent wiping in accordance with SSPC-SP-1. At a minimum, power tool clean the metal per SSPC-SP-3 being careful not to polish the metal.
 - Wire Wheeling should be avoided to prevent polishing the metal
- The properly prepared metal surface should have appropriate sharp and angular profile for the paint to mechanically bond.
- Superior performance is always achieved with an abrasive blast to a minimum of SSPC SP-6 Commercial Blast cleanliness.

NON-FERROUS METAL & FIBERGLASS:

- Clean the metal/fiberglass surface of any contaminants such as oil, grease, mold release or dirt.
- Apply a bonding primer suitable for the metal being painted if mechanical surface preparation is not possible.
- At a minimum, scuff sand the metal or fiberglass surface with appropriate sandpaper to provide a uniformly dulled surface with adequate surface profile and remove sanding dust prior to painting.

UNPAINTED CONCRETE:

- Remove all surface contamination, form release agents, moisture curing membranes, mildew, efflorescence, etc. by washing with an appropriate cleaner. Then rinse and allow to dry.
- Do not apply to damp or wet surfaces.
- Concrete or mortar needs to be cured approximately 30 days at 70F.
- For porous CMU substrates use appropriate block filler.
 - Do not apply block filler to smooth surfaces as peeling may occur.

NEW OR BARE WOOD (INTERIOR):

- Sand with appropriate sandpaper to remove mill glaze and expose fresh wood cells prior to applying appropriate wood sealer or primer
- Remove sanding dust prior to application of sealer or primer.
- Seal with correct primer for wood substrates.

PRE-PAINTED SURFACES:

- Wash with a mild detergent and water solution. Rinse thoroughly, allow to dry thoroughly.
- All glossy or hard smooth surfaces should be scuff sanded using appropriate sandpaper to provide a uniformly dull appearance on all substrates.
- Remove all sanding dust prior to painting.

WARNING! If you scrape, sand or remove old paint from any surface you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN.

PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Carefully clean up with a wet mop or HEPA vacuum. For additional information on surfaces that may contain lead paint, contact the U.S. EPA / Lead Information Hotline at 1.800.424.LEAD (5323).

PRIMER RECOMMENDATION:

Steel (ferrous metal):

EcoLogic 70323 Primer

Galvanized Metal:

EcoLogic 70323 Primer

Aluminum (non-ferrous metal):

Cloverdale ClovaPrep 83020 Epoxy or 83060 Vinyl Wash Primer

Fiberglass:

First Coat Bonding Primer or other Approved Suitable Bonding Primers

Masonry (other than porous block):

First Coat Bonding Primer or pHLEX-TITE Elastomeric Primer

Porous Masonry Block:

Fill voids with 501901 Sprayable Block Filler

Interior Dry New Wood:

Unique II Undercoater or First Coat Bonding Primer

Interior Dry Wall:

Scotseal Primer





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SAFETY PRECAUTION

Safety Precautions: For detailed information please refer to this product's safety data sheet (SDS) – A copy of which can be found on our website, www.rodmapaint.com under Products/Product Data Sheets and SDS

UPDATES/AMENDMENTS

Please visit www.rodmapaint.com for the most recent versions of Technical Data Sheets and Safety Data Sheets

LIMITATION OF LIABILITY

To the best of our knowledge, the technical data contained herein are true and accurate at the time of issuance but are subject to change without prior notice. We guarantee our product to conform to the specifications contained herein. All technical advice, recommendations and services regarding this product are rendered by the Seller gratis.

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Rodda Paint Co. manufactures quality products and warrants its product to be free from defects in materials and workmanship. In the event that this product is defective or in any way unsuitable for the application for which it was sold, Rodda Paint Co. will REPLACE ANY PRODUCT PROVED TO BE DEFECTIVE free of charge OR REFUND THE ORIGINAL PURCHASE PRICE OF THE QUANTITY PROVED. This warranty is the only guarantee of quality made in respect of this product by Rodda Paint Co. By purchasing this product the customer accepts this warranty in lieu of all others, and waives all claims to any other remedy arising from any warranty or guarantee of quality, whether such warranty or guarantee of quality was made expressly to the customer or implied by any applicable law.

TO BE DEFECTIVE – Requests for refund or replacement of product must be made in writing within one year from the original date of purchase. This Warranty does not apply to defects due, directly or indirectly, to misuse, abuse, negligent application, or acts of God.

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READ LABEL AND SAFETY DATA SHEET PRIOR TO USE!



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Page 4 of 4
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