

ERS 5600-RINO GLASS

LIQUID GRADE - PASTE GRADE

Extreme performance in corrosion protection at high temperatures using state of the art rinoglass Novolac chemistry and technology.

Extreme Chemical Resistance

Extreme Performance
at High Temperatures

Extreme Adhesion

Suitable for Total and
Permanent Immersion

100% Solids

2 Year Storage Life

Brush, Roller or Spray Applied

Environmentally Friendly

- » **ERS-5600** is a two component, 100% solid, Novolac epoxy, coating system, engineered for extreme temperature and corrosive conditions.
- » **ERS-5600** pull off adhesion is 3,350 psi.
- » **ERS-5600** Liquid Grade is readily applied by brush, roller or spray.
- » **ERS-5600** Paste Grade is designed for knife and trowel application to restore corrosion to profile.
- » **ERS-5600** Liquid and Paste grade is the ultimate solution for extreme service and conditions.
- » **ERS-5600** Rinoglass exhibits a glass like finish that is ideal for fluid flow application.

- » Acid Storage Tanks
- » Stacks
- » Acid Leaks
- » Secondary Containment
- » Steam Cut Flange Face
- » Exchanger Components
- » Tank Linings
- » Pipe Wrap System
- » Railcars
- » Tankers
- » Pipe Lining
- » Tube Sheets

Extreme chemical protection system at extreme temperatures. For heat exchangers, tank lining and pipe wraps.

TECHNICAL DATA

Volume Capacity	231cu in per gallon		
Weight per gallon	11.50 lb.		
Coverage per gallon	160 sf @ 10 mils DFT		
Volume solids	100% (No VOC)		
Applications required	2-3 coats at 8 or 12 mils each 3-4 coats at 8 or 12 mils each for high temp/severe chemical service		
Shelf Life	2 years		
Mixing Ratio		Base	Activator
	-Volume	3.0	1.0
	-Weight	5.0	1.0
Color		Clear/Red	Amber

CURE TIMES

Ambient Temp.	Pot Life	Overcoat Window Min — Max	Light Load	Aqueous Immersion	Full Service
40° F	5 1/2 hr.	NR	NR	NR	NR
50° F	1 hr.	3 hr. — 12 hr.	24 hr.	72 hr.	7 day
77° F	30 min.	1 1/2 hr. — 6 hr.	12 hr.	30 hr.	7 day
95° F	15 min.	3/4 hr. — 3 hr.	8 hr.	15 hr.	4 day

PUMP SPECIFICATIONS

Pump Ratio	Minimum Output	Minimum Hose ID	Maximum Hose Length
56:1	5,600 psi	3/8 - 1/2-in	50-ft.

Tip Size: 0.027" - 0.029"

PHYSICAL PROPERTIES

	Test Value T	Test method
Compressive Strength	11,000-14,000 psi	ASTM C109
Pull Off Adhesion	3,350 psi	ASTM D4541
Rockwell Hardness	84 Shore D	ASTM D2240
Abrasion Resistance	<40 mg	ASTM D4060 (1000 cycles)

CHEMICAL RESISTANCE

Ammonium Hydroxide	MEK
Aromatic & Aliphatic Solvents	Nitric Acid (up to 30%)
Black Liquor	Organic Acids (many)
Butyl Acetate	Phosphates
Chlorinated Solvents (except Methylene Chloride)	Phosphoric Acid (up to 100%) Potassium Hydroxide
Chlorides	Salts
Hydrochloric Acid (up to 100%) (38% hydrogen chloride)	Sodium Hydroxide (up to 50%) Sodium Hypochlorite (up to 50%)
Hydrofluoric Acid (up to 35%)	Sulfides
Hydrogen Sulfide	Sulfuric Acid (splash/spill 98%) White Liquor

SERVICE TEMPERATURE

	Max continuous Exposure	Short Term Spike (30-60 min)
Dry Service	450°F	550°F
Spill/Splash	375°F	
Under Insulation	300°F	

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USING ERS-5600

Surface preparation: ERS-5600 should only be applied to clean, dry and well-roughened surfaces. Depending on the surface, solvent clean or remove contamination by abrasive blasting, stream cleaning, high pressure water blasting, acid washing or other suitable means. SALT-X should be used for seawater, salts, bromates, phosphates, gypsum or lime.

Metal, steel, and iron: Remove all oil, grease, or scale from the surface and then blast with an angular grit to give a minimum of 2-3 mil profile for the following services:

Non-chemical Service	SSPC-SP6 Commercial Blast
Intermittent Splash	SSPC-SP10 near White Metal
Immersion/Abrasion	SSPC-SP5 White Metal Blast

ALUMINUM AND FRP: Use an alkaline detergent cleaner to provide a clean, uniformly textured surfaced.

Concrete: All concrete surfaces should be primed with ERS-1100 to avoid out gassing and to increase adhesion. Although ERS-1100 can be applied to concrete that has cured a minimum of 7 days, it is recommended that it has aged at least 28 days before coating. Wash down old concrete to remove residues and neutralize the pH before surface prep. A second wash may be required for severe service. Sandblast, scarify or water blast to remove any form-release agent, curing agent, laitance, calcification or sealant. Two coats of ERS-1100 may be needed to prevent bubbles on highly air-entrained concrete.

Mixing Procedure: (Mixing partial kits is not recommended.)

1. Empty all the hardener into the resin container.
2. Mix thoroughly with a mechanical mixer (or stirrer). Continue for 2 minutes after consistency is uniform. Keep blade low, to avoid trapping air.

Thinning:

Spray: Up to 6.5 oz/gal (5%) with ERS Thinner

Brush: Up to 8 oz/gal (6%) with ERS Thinner

Roller: Up to 8 oz/gal (6%) with ERS Thinner

Application: Pour blended coating into rolling tray or a large basting pan to a depth of 3/8-in. or less to reduce exothermic, heat generation and shortened pot-life.

1. If the ambient temperature is 85°F or higher, pot life may be as short as 10 minutes. Keep the material cool or put the tray on ice to extend life.

2. ERS-5600 should not be applied below 40°F

3. ERS-5600 may be applied when the relative humidity is over 85% even if the substrate is damp. (Adhesion may be reduced)

4. Apply additional coats when the previous coat will string out (pigtail) and hold its shape when touched. Second and subsequent coats must be applied before the previous coat has completely cross-linked. If the overcoat window has expired, then brush blast before the next application.

5. The same procedure applies for overlapping seams of adjacent coating to create a continuous, monolithic film. Power brush / sand the seam, if blasting is not possible.

Speed Curing: The cure time can be reduced and performance enhanced by applying heat during curing.

Clean up: Use a mixture of MIBK and butyl acetate (50/50), MEK or MIBK and xylene (50/50) for clean up. Skin can be cleaned with denatured alcohol (ethanol.)

Technical Support: The ERS engineering team is always available to provide technical support and assistance. For guidance on any question, call your local ERS rep or the ERS Engineering Center.