Ganicin™ 2.8 ZR-E™
Zinc-Rich Epoxy Primer

GENERAL

DESCRIPTION
A three-package, VOC conforming (2.8 lbs/gal) low HAPS, zinc-rich epoxy primer based on Axalta epoxy amine technology. The resulting organic zinc-rich primer is designed to deliver excellent corrosion resistance.

Conforms to SSPC- 20 Class I definitions for zinc-rich products containing 85% zinc in the dry film.

PERFORMANCE PROPERTIES (WHEN USED IN A SYSTEM)

Adhesion	Excellent
Solvent Resistance	Excellent
Chemical Resistance (watch glass)	Excellent
Color & Gloss Retention	Excellent
Salt Fog & Humidity	Excellent

SUGGESTED USES:
As a high performance primer coating on properly prepared carbon steel, or as a touch up for inorganic zinc coatings where:
- an organic zinc-rich primer is required
- a zinc-rich product containing 85% zinc in the dry film is desired
- Spot application by brush (small areas) in addition to spraying, may be necessary

NOT RECOMMENDED FOR:
- Immersion Service
- Marginally prepared surfaces

COMPATIBILITY WITH OTHER COATINGS
Ganicin 2.8 ZR-E should be topcoated with other Axalta coatings including, but not limited to Imron® 2.1 PR™, Imron 2.8 PR™ or other polyurethane primers or Corlar® 2.1 PR-P™, Corlar 2.1 ST™ or other Axalta epoxy primers. Imron 2.1 HG™ +, Imron 3.5 HG™ + high gloss polyurethane enamels or other Axalta polyurethane topcoats can also be applied on top of the zinc-rich epoxy primer / epoxy / urethane intermediate coats, for a complete system. In some select environments, Ganicin 2.8 ZR-E can also be directly topcoat with Axalta polyurethane topcoats. Contact your Axalta representative for specific recommendations.

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.

COLOR
Grey Green

MIXING

COMPONENTS

Epoxy base – 525-ZR-101™	1 short-filled gallon container (0.375 gal)
Zinc-rich primer activator - FG-39042™	1 pint (100% full)
Zinc dust – 347YB1500™	13.4 lbs

MIX RATIO

Component	**Part by Volume**
Epoxy base – 525-ZR-101	1 - short-filled gallon container (0.375 gal)
Zinc-rich primer activator – FG-39042	1 - pint (0.125 gal)
Zinc dust – 347YB1500	1 – 13.4 lbs container

NOTE: Mixed amount will makes 0.73 gallon.

ACTIVATION

Please use the following chart for ratios for other mixes:

Component	**Amount**		
525-ZR-101	24 oz	48 oz	64 oz
FG-39042	8 oz	16 oz	21 oz
347YB1500	6.7 lb	13.4 lb	17.8 lb
RTS	52 oz	94 oz	125 oz

MIXING AND REDUCTION

Thoroughly mix base component, 525-ZR-101 until uniform. Add one (1) pint of FG-39042 Zinc-Rich Epoxy Activator to the short filled base container. Mix until uniform. To this mixture, add one (1) container, 13.4 lbs, of 347YB1500 Ganicin Zinc Dust. Add zinc dust slowly with constant agitation. Power mixing is best. Do not drop in as clumps may form. Mix until uniform. No induction time is necessary.

Once mixed, filter through a 40 mesh screen into an agitated spray pot. Constant agitation of mixed product is recommended to properly keep zinc dust from settling during application.

No reduction should be necessary. However, if conditions exist where thinning is desired, and compliance with 2.8 VOC is not required, up to 5% of T-8054™ can be added for additional flexibility.

APPLICATION THINNERS

Spray: T-8054 - 0-5%

INDUCTION TIME

None

POT LIFE

@ 70°F (21°C)

No reduction	3 hours
With 5% T-8054	1 hours

APPLICATION

APPLICATION CONDITIONS

Do not apply if the application surface or ambient temperature is below 50°F (10°C) or above 95°F (35°C), or if the atmospheric temperature is within 5°F of the dew point. Relative Humidity should be below 90%.

SURFACE PREPARATION

All surfaces must be clean, dry and free of loose rust, oil, grease, and all other contamination. For best results, prepare surface to an SSPC-SP-6 Commercial Blast.

APPLICATION EQUIPMENT

Apply by spray for best results. Ganicin 2.8 ZR-E may also be applied by brush for small touch up areas.

Manufacturers listed below are a guide. Others may be used. Changes in pressure and tip size may be required to achieve proper application.

Brush
Wooster Nylon Bristle (for spot repairs only)

SPRAY APPLICATION

Manufacturers listed below are a guide. Others may be used. Changes in tip size or pressure may be required to achieve proper application.

Conventional Spray

	Sata	DeVilbiss
Spray Gun:	1000K RP	Plus-514P-12
Fluid Nozzle:	1.1; #132100	1.4
Air Cap:	1.3; #132118	#414 HE

HVLP Spray

	Sata	DeVilbiss
Spray Gun:	1000K HVLP	GTI-Millen 546P-14
Fluid Nozzle:	1.0: #139204	1.4
Air Cap:	1.2: #139212	#46MP

Airless Spray

Pump:	Graco Merkur 30:1
Airless Gun:	XTR-705
Fluid Hose:	3/8" x 100' max.
Tips:	511 RAC

Minimum pressure to avoid fingering: 2400 psi min.

Application Notes

- Must be agitated during application.
- For conventional air spray, fluid lines should be 0.5” inner diameter and 25-50’ long maximum.
- For best results, keep pressure pot at the same height as the work.
- Apply a full, wet coat. Try not to exceed specified film build thickness.
- EQUIPMENT RECOMMENDATION: Pressure feed, 1.4 - 1.8 tungsten or specially treated fluid tip & needle, agitator pot.

CLEAN UP THINNERS

Use Axalta Y32035™ or T-1022. Dispose of waste following local guidelines.

DRY TIMES

Cure time at recommended thickness @ 77°F (25°C), 50% RH

Dry to touch	1 hours
Dry to recoat	4 hours
Dry to handle	3-4 hours
Pack/ship	8-12 hours
Pot life	3 hours

Higher temperatures and air flow will reduce dry times.

To ensure optimum adhesion, Ganicin 2.8 ZR-E should be topcoated within 72 hours. When allowed to sit for longer than 72 hours, Ganicin 2.8 ZR-E must be sanded.

PHYSICAL PROPERTIES

Maximum Service Temperature:	250°F (121°C)
Gloss (ASTM D 523)	flat @ 60° angle
Weight Solids (Avg. varies by color):	86% ± 1%
Weight per gallon-(Avg. varies by color):	23.64 lbs. ± 2%
Flash Point-Tag Closed Cup:	20 – 70°F (-7 to 23°C)
Volume Solids:	55% ± 2%
Shelf Life:	1 year minimum
Theoretical Coverage Per Gallon*:	886 @ 1 mil DFT 222 ft² @ 4 mils DFT
Suggested Film Builds**:	3 - 7 mils (75 – 175 µm) wet (WFT) 2 - 4 mils (50 – 100 µm) dry (DFT)

*Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements.
**Application by brush and roller may require additional coats to achieve recommended films thickness.

STORAGE CONDITIONS

Store in a dry, well-ventilated area. Storage conditions should be between -30°F (-34°C) and 120°F (48°C).

VOC INFORMATION

Theoretical VOC (less water and exempt compounds) and HAPS content

	VOC lbs/gal	HAPS lbs/gal
Activated with FG-39042 + 13.4 lbs. 347YB1500	2.7	0.10
Activated with FG-39042 + 13.4 lbs. 347YB1500 + 5% T-8054	3.0	0.10

ASTM INFORMATION

Performance properties are for Ganicin 2.8 ZR-E. For other system recommendations, please contact Axalta. System properties will be enhanced when top coated with appropriate epoxy intermediate coat and Urethane Topcoat for a complete system.

Paint System:	Ganicin 2.8 ZR-E
Type | Color:	Epoxy Zinc-Rich | grey green
DFT:	2 - 4 mils

Description	Test Method	Duration	ASTMD1654 Scribe Rating	ASTM D714 Blister Rating	ASTM D3359 Adhesion Rating
Salt Fog Resistance	ASTM B117	2000 hrs	10	10-none	-
Humidity Resistance	ASTM D2247	2000 hrs	-	10-none	-
Adhesion	ASTM D3359	Initial	-	-	5A
Humidity Adhesion	ASTM D3359	2000 hrs	-	-	5A
Cyclic Corrosion Resistance	ASTM G85	2000 hrs	10	10-none	-
Impact Resistance	ASTM D2794	30 inch lbs (forward only)			
Mandrel Bend	ASTM D522	Pass 1”			
Stone Chip Resistance	ASTM D3170	5			
Pencil Hardness	ASTM D3363	5H			

SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS precautions. If mixed with other components, mixture will have hazards of all components.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

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