

1K Organic Zinc Rich Primer

ZNP-101

ZNP-101 is a one-component organic zinc rich primer that is a ready-for-use, self-curing, cathodically protective maintenance coating.

It can be applied over properly prepared blasted steel or used as a touch-up primer for selected galvanized steel or zinc rich coatings.

Features and Benefits:

- Excellent corrosion resistance
- Easy to use, one component

Associated Products:

- ZNP-101 1K Organic Zinc Rich Primer

Physical Constants: *All values are theoretical, depend on color and are Ready-to-Spray. Actual values could vary slightly due to manufacturing variability.*

	ZNP-101
Density (lbs/gal)	16.53
Percent solids (by weight)	70.3%
Percent solids (by volume)	30.0%
VOC (lbs/gal)	4.70
Flashpoint	68°F (19°C)
HAPs	≤1.6 lbs/gal
Photo-chemically reactive	Yes

Directions for Use:

Substrate Preparation:

Zinc rich coatings require direct contact between the zinc pigment in the coating and the metal substrate for optimum performance. Surface must be prepared by abrasive blasting or chemical cleaning free of dirt, grease and oil. Steel surfaces must be thoroughly cleaned and preferably phosphated for maximum adhesion. An epoxy intermediate primer is recommended for maximum corrosion protection.

Substrate	Direct to properly treated substrate
Cold Rolled Steel	Excellent
Hot Rolled Steel	Excellent
Galvaneal	Not Recommended
Galvanized	Not Recommended
Aluminum	Not Recommended
Plastic / Fiberglass	Not Recommended

Note: For improved performance between this primer and CPC topcoats please see the CPC Primer/Topcoat compatibility chart (CPCTB01).

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Directions for Use (continued)

Mix Directions:

 	Mix Directions:	Do not shake this product. ZNP-101 must be blade mixed. Stir thoroughly before and occasionally during use.
	Thinning:	Up to 50% of Q89 / CPC-SP9001 Slow Thinner ONLY.
	Blend Ratio	N/A
	Pot Life @ 77°F:	N/A
	Spray Viscosity Range:	#2 Zahn 28 seconds #3 Zahn 17 seconds
	Unopened Shelf Life:	6 months

Application Equipment:

	Conventional (with a mixing Pressure Pot):	1.5 – 2.0 tip with 50 psi at the gun. Fluid pressure: 10 – 12 psi
	HVLP (with a mixing Pressure Pot):	1.5 – 2.0 tip with 10 psi at the cap or per manufacturer. Fluid pressure: 10 – 12 psi
	Airless:	0.017" tip with fluid pressure 2,000 psi. USE TEFLON PACKINGS AND CONTINUOUS AGITATION.
	Air-Assisted Airless:	No recommendation
	Brush or Roll:	Small areas only
	Electrostatic:	Not recommended

Application:

	Apply:	1 – 2 wet coats. Special attention should be given to all edges, pits, welds, corners, rivets, and other rough spots to ensure complete coverage.
	Recommended Wet Film Build:	2.4 – 5.0 mils
	Recommended Dry Film Build:*	0.8 – 1.5 mils
	Square Foot Coverage:	481 sq. ft.
	@ 1.0 mil no loss	

** Film in excess or below these recommended films may cause problems such as adhesion failure, pigment float, solvent popping, slow cure, and accelerated gloss and color failure.*

Dry Times:

	Air Dry @ 77°F 50% RH:	
	To Touch:	10 minutes
	To Handle:*	30 minutes
	To Recoat:	Recoat should not be necessary
	To Topcoat:	45 – 90 minutes
	Force Dry:	If required, can be force dried up to 300°F after a 10 minute flash.

** Paint film is not fully cured for 7 days. Drying time listed may vary, depending upon film build, color selection, temperature, humidity and degree of air movement.*

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Technical Data*

Performance Properties:

Blasted Hot Rolled Steel
ZNP-101

Test	ASTM Method	Result
Gloss	D523	Flat
Adhesion	D3359	5B
In Service Temperature Limit		400°F

Weather Resistance:

Blasted Hot Rolled Steel
ZNP-101
CRE-904
AUE-360

	ASTM Method	Result
Salt Spray – 3.500 hours	B117	
Corrosion Creep	D1654	6A – 7A
Scribe Blisters	D714	8M
Face Blisters	D714	Micro
Humidity – 500 hours	D2247	
5 Minute Recovery Adhesion	D3359	4B
1 Hour Recovery Adhesion	D3359	3B
24 Hour Recovery Adhesion	D3359	3B

All tests results assume proper cure and preparation of test substrates.

*The application and performance property data above are believed to be reliable based on laboratory findings. It is for the buyer to satisfy itself on the suitability of the product for its particular use. Variation in environment, procedures of use, or extrapolation of data may cause unsatisfactory results.

Miscellaneous:

This product should not be applied to zinc substrates.

This product should not be sanded due to the zinc dust that would be created.

For optimum properties, an epoxy sealer should be utilized as a tie-coat between the ZNP-101 and topcoat.

Safety:



These materials are designed for application only by professional, trained personnel, using proper equipment under controlled conditions and are not intended for sale to the general public.

Safe application of paints and coatings requires knowledge of equipment, materials and individual training. Directions and precautionary information on both equipment and products should be carefully read and strictly observed for personal safety and property protection. Consideration must be given to eliminate conditions, which may generate hazardous atmospheres during spray application or subject operators or bystanders to injury or illness.

Special precautions must be taken when utilizing spray equipment, particularly airless equipment. High-pressure injection of coatings into the skin by airless equipment may cause serious injury requiring immediate medical attention at a hospital. Treatment advice may also be obtained from Poison Centers.

Air quality should be maintained with adequate ventilation; applicators can achieve additional protection by wearing respirators and other protective garments such as gloves and overalls. In all cases, wear protective eye equipment. During the application of all coatings materials, all flames, welding and smoking must be prohibited. Explosion proof equipment must be used when coating these materials in confined areas.

PRECAUTIONARY INFORMATION

Before using the products listed herein, carefully read each product label and follow directions for its use. Please read and observe all warnings and precautionary information on all product labels. Prevent all contact with skin and eyes and breathing of vapors and spray mist. Repeated inhalation of high vapor concentrations may cause a series of progressive effects including irritation of the respiratory system, permanent brain and nervous system damage and possible unconsciousness and death in poorly ventilated areas. Eye watering, headaches, nausea, dizziness and loss of coordination are indications that solvent levels are too high. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

KEEP OUT OF THE REACH OF CHILDREN

MEDICAL RESPONSE

Emergency Medical or Spill Control Information (412) 434-4515; CANADA (514) 645-1320 and in MEXICO 01-800-00-21-400. Have label information available.



Safety Data Sheets (SDS) for the PPG products mentioned in this publication are available through www.ppgcommercialcoatings.com (Safety, SDS Search) or your PPG Distributor.

For additional information regarding this product, see the SDS and LABEL information.



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