



## ZRC ZERO VOC® Water-Based Galvanizing Compound

ZRC's revolutionary new water-based galvanizing compound offers a solution to problems of traditional inorganic zinc and solvent-based coatings.

### Enjoy the following great benefits with ZRC's ZERO VOC:

- No solvents or solvent fumes
- 93% zinc in the dry film using only Type III "ultra pure" ASTM-D-520 zinc
- Extreme temperature and abrasion resistance
- ISO 9001 registration assures the highest quality consistently
- Meets and exceeds Fed. Spec. DOD-P-21035A (Galvanizing Repair Spec); MIL-P-26915A (USAF Zinc Dust Primer); SSPC-Paint 20 (Specification for Zinc-Rich Primer)
- Passes 10,000 hours salt spray testing without failure (ASTM Des. B117)
- Passes Preece Test (ASTM Des. A239) for hot-dip galvanizing

For specification assistance, application assistance, test reports and product selection please contact our customer support at (800) 831-3275 or our website [www.zrcworldwide.com](http://www.zrcworldwide.com).



### APPLICATIONS

Galvanize bare metal conveniently in your own facility without the transportation and costs of hot-dip galvanizing.

#### The natural solution for:

OEM  
 Petrochemical plants  
 Metal fabricators  
 Tanks  
 Marine and offshore  
 and hundreds more!

## THE ZRC ZERO VOC DIFFERENCE

ZRC ZERO VOC solves the problems inherent in traditional inorganic zinc coatings: near-white sandblasting, difficult spraying, short pot life. We've resolved these issues by creating a unique hybrid featuring the best features of organic and traditional inorganic zinc coatings. As a result, ZRC ZERO VOC offers the same true cathodic protection as our original ZRC, without volatile organic content.

- No sandblasting required\*
- Longer pot life
- Applies easily without clogging spray equipment
- More abrasion resistant and faster drying
- One coat coverage with second coat option

\* See Surface Preparation section of Technical Specifications

## TESTING & SPECIFICATION CONFORMANCE DATA

- Meets and exceeds Fed. Spec. DLD-P-21035A, formerly MIL-P-21035 (Galvanizing Repair Spec.)
- Meets and exceeds Fed. Spec. MIL-P-26915A (USAD Zinc Dust Primer)
- Passes over 10,000 hours salt spray testing without failure\*\* (ASTM Des. B117)
- Passes Preece Test (ASTM Des. A239) for hot-dip galvanizing
- Resists intermittent dry-heat temperatures up to 1700°F
- Meets and exceeds SSPC-Paint 20 (Specification for Zinc Rich Primer), Type II (organic), Level I, Type III zinc dust

## AVAILABILITY/COST

Immediately available off the shelf, ZRC ZERO VOC Galvanizing Compound is offered directly from the manufacturer, or through a worldwide distribution network. The initial cost of ZERO VOC is more than offset by substantial maintenance savings and the increased service life of protected surfaces. ZERO VOC is available in gallon kits. Contact ZRC Worldwide for current pricing and further information.

## MATERIALS/FINISHES

A unique formulation of 93% pure zinc metal as a liquid coating, ZRC ZERO VOC is manufactured to exacting standards in our own state-of-the-art manufacturing facility.

## SUGGESTED SPECIFICATION

A water-based, two-component zinc-rich coating containing 93% metallic zinc (ASTM D 520 Type III), by weight, in the dried film; as manufactured by ZRC Worldwide, Marshfield, MA (www.zrcworldwide.com) or other facility having been registered to the International Organization for Standardization ISO 9001:2000 standard for quality.

\*\*Copy of reports available upon request

## Technical Data

<b>TYPE</b>	Two-pack water-based galvanizing compound
<b>COVERAGE</b>	300-350 ft <sup>2</sup> (28-33 m <sup>2</sup> ) per gallon kit @ 1.5 mil (38 μ) dry film thickness
<b>METALLIC ZINC CONTENT</b>	93% by weight in dry film
<b>FLASH POINT</b>	None
<b>VOC CONTENT</b>	0 lbs/gal (0 gms/ltr) (ASTM D3960)
<b>WEIGHT PER GALLON</b>	25.2 lbs. (ASTM D1475)
<b>SOLIDS CONTENT</b>	81% (by weight)/43.7% (by volume)
<b>VISCOSITY</b>	525 cps. Brookfield RVT spindle #5 @100 RPM, 25°C
<b>MAXIMUM SERVICE TEMP - Intermittent</b>	1700°F (927°C)
<b>MAXIMUM SERVICE TEMP - Constant</b>	1200°F (694°C)
<b>ELECTRICAL CONDUCTIVITY</b>	2 million ohms per square @ 3 mils dry (resistivity)
<b>ADHESION</b>	275 lbs./in <sup>2</sup> (ASTM D 4541, Elcometer Model F106)
<b>IMPACT RESISTANCE</b>	Greater than 172 inch lbs. (extrusion) (per ASTM-D2794)
<b>POT LIFE</b>	24 hours (longer times before use will result in diminished performance)
<b>SHELF LIFE</b>	2 yrs.
<b>PACKAGING</b>	One-gallon kits
<b>DRY TIME</b>	Set to touch. When ambient air dried, 15 minutes at 1.5 mil (38μ) thickness
<b>ADDITIONAL COATS</b>	Additional coats - up to 6.0 mils total dft (152 μ) - may be applied. Allow a 4 hr. minimum cure time at 25°C/77°F to extend corrosion protection
<b>TOPCOATING</b>	After 24 hrs., topcoat with acrylic, epoxy, urethane or vinyl type products. DO NOT USE alkyd or alkyd-modified acrylic-type products. Consult our Guide to Topcoating for detailed instructions.

## Surface Preparation

Dependant upon surface condition and intended service. Typical examples include:

<b>GREASE &amp; OILS</b>	Solvent clean to SSPC-SP1
<b>RUST SCALE</b>	Power tool clean to SSPC-SP3 or SSPC-SP11 (SIS St 2 or 3)
<b>MILL SCALE</b>	Sandblast to SSPC-SP6 (commercial)
<b>WATER IMMERSION</b>	(100°F maximum) Sandblast to SSPC-SP10 (near-white)

## Application

<b>BRUSH/ROLLER</b>	Consult our Application Guide for ZERO VOC
<b>SPRAY (low pressure compressor type)</b>	
Atomized air pressure	50 lbs/in <sup>2</sup> = 3.5 kg/cm <sup>2</sup>
Fluid pressure	15-20 lbs/in <sup>2</sup> = 1.1-1.4 kg/cm <sup>2</sup>
Orifice of tip	0.080 inches (0.20 cm)
Viscosity reduction	Add water only if absolutely necessary
<b>SPRAY (airless type)</b>	
Pump	30:1
Hose	1/2" (1.3 cm) (I.D.)
Orifice of tip	60°-0.026 inches (0.07 cm)
Type of tip	Tungsten carbide, reversing
Filter screens	Complete removal is recommended. However, if screens are employed, use no less than 30 mesh.
Viscosity	No reduction required
Recommended procedure	Connect hose directly to pump, without filter assembly, ensuring a hose length of 50 ft. max. Use in-pot agitator or continuous recycling. Use least pressure possible. Start at 1500 lbs/in <sup>2</sup> = 105 kg/cm <sup>2</sup> and increase as required for good spraying.

## CLEAN UP

Water



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ZRC Worldwide has been registered by Underwriters Laboratories, Inc., to the International Organization for Standardization ISO 9000 Series Standards for Quality. The fact that ZRC is registered to ISO 9001 assures our customers that the zinc-rich coatings manufactured in our facility are designed and manufactured according to the most stringent quality control standards, so you can rely on their consistency.