

# ZRC® Cold Galvanizing Repair Compound

The original Cold Galvanizing Compound! Providing superior zinc coating protection for over 50 years!

## Enjoy the following great benefits with ZRC Cold Galvanizing Compound:

- 95% zinc in the dry film using only Type III “ultra pure” ASTM-D-520 zinc
- Meets and exceeds Fed. Spec. DOD-P-21035A (Galvanizing Repair Spec); MIL-P-26915A (USAF Zinc Dust Primer); ASTM Des. A-780 (Standard Practice for Repair of Damaged Hot-Dip Galvanized Coatings; SSPC-Paint 20 (Specification for Zinc-Rich Primer)
- Passes 3,000 hours salt spray testing without failure (ASTM Des. B117)
- Passes Preece Test (ASTM Des. A239) for hot-dip galvanizing
- Passes 9-year subtropical testing
- Low VOC approved in all 50 states
- SO 9001 registration assures the highest quality consistently

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).



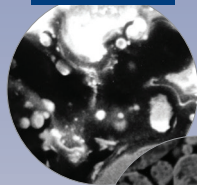
## APPLICATIONS

Field applied galvanizing  
 Repairing hot-dip galvanizing  
 Rust proofing welds  
 Repairing inorganic zinc  
 Re-galvanizing of worn hot-dip  
 Metal fabrication  
 Construction  
 Manufacturing/OEM  
 Antenna Towers  
 Petrochemical Plants  
 Roads & Bridges  
 Tanks  
 Industrial Maintenance  
 Water Treatment  
 Marine & Offshore  
 Cooling Towers  
 Hundreds more!

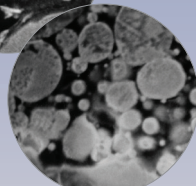
## THE ZRC DIFFERENCE

The ZRC difference is made possible by ZRC's high zinc content (95% by weight in the dried film) of “ultra pure” (ASTM D 520 Type III) zinc dust, ensuring that more metallic zinc is available for superior galvanic protection against corrosion. This high purity zinc dust is compounded with a tenacious non-encapsulating binder using a highly controlled trade secret process in our state-of-the-art manufacturing facility.

### Competitor



The result is a self-healing galvanic film that does not require sand-blasting for most applications, providing both up-front labor savings and extended longevity of corrosion protection. We offer a Certificate of Compliance to these exacting material standards and a copy of our most recent ISO Registration Certificate.



ZRC

### The Proof is in the Photos

These scanning electron microscope photos illustrate the difference between the true galvanic protection of ZRC and a competitor's low percentage zinc coating.

## TESTING & SPECIFICATION CONFORMANCE DATA

- Meets and exceeds Fed. Spec. DOD-P-21035A, formerly MIL-P-21035 (Galvanizing Repair Spec.)
- Meets and exceeds Fed. Spec. MIL-P-26915A (USAD Zinc Dust Primer)
- Passes 3,000 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 750°F
- Meets and exceeds ASTM Des. A-780 (Standard Practice for Repair of Damaged Hot-Dip Galvanized Coatings)
- 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 Cold Galvanizing Compound is offered directly from the manufacturer, or through a worldwide distribution network. The initial cost of ZRC is more than offset by substantial maintenance savings and the increased service life of protected surfaces. Contact ZRC Worldwide for current pricing and further information.

## MATERIALS/FINISHES

A unique formulation of 95% pure zinc metal as a liquid coating, ZRC Cold Galvanizing Compound is manufactured to exacting standards in our own state-of-the-art manufacturing facility.

## SUGGESTED SPECIFICATION

Organic Zinc-Rich coating containing 95% metallic zinc, by weight in the dried film; as manufactured by ZRC Worldwide, Marshfield, MA ([www.zrcworldwide.com](http://www.zrcworldwide.com)) or other facility having been registered to the International Organization for Standardization ISO 9001 standard for quality.

For areas and industries with more stringent VOC restrictions specify ZRC 221.

\*\* Copy of reports available upon request



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## Technical Data

TYPE	Single pack, premixed, ready to apply, liquid organic zinc compound
THEORETICAL COVERAGE	400 ft <sup>2</sup> /gal @ 1.5 mil dry film thickness
METALLIC ZINC CONTENT	95% by weight in dry film
FLASH POINT	111°F (44°C) (SETA method, ASTM D3278)
VOC CONTENT	3.3 lbs/gal (385 gms/ltr) (ASTM D3960)
WEIGHT PER GALLON	24 lbs. (ASTM D1475)
SOLIDS CONTENT	86% (by weight)/52% (by volume)
VISCOSITY	1900 cps. Brookfield spindle #5 @ 100 RPM, @ 25°C
MAXIMUM SERVICE TEMP - Intermittent	750°F (399)°C
MAXIMUM SERVICE TEMP - Constant	350°F (177)°C
ELECTRICAL CONDUCTIVITY	73 million ohms per square @ 3 mils dry (resistivity)
IMPACT RESISTANCE	Greater than 30 inch-lbs. (extrusion) per ASTM-D2794
ABRASION RESISTANCE	11.5 liters per dry mil (tested @ 3 dry mils) per ASTM-D98-51
POT LIFE	At least 24 hrs.
PACKAGING	3.5 gallon pails, gallon, quart, and aerosol cans
DRY TIME	Set to touch. When ambient air dried, 20-30 min. @ 1.5 mil (38μ) thickness
RECOAT TIME	(Second Coat) 12 hrs.

**TOPCOATING**  
After 24-48 hrs., topcoat with acrylic, epoxy, urethane or vinyl type products. DO NOT USE alkyd, alkyd-modified acrylic, or lacquer type products. Consult our Guide to Topcoating for detailed instructions.

## Surface Preparation

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

GREASE & OILS	Solvent clean to SSPC-SP1
RUST SCALE	Power tool clean to SSPC-SP3 or SSPC-SP11
MILL SCALE	Sandblast to SSPC-SP6 (commercial)
WATER IMMERSION	(100°F maximum) Sandblast to SSPC-SP10 (near-white)

## Application

BRUSH/ROLLER/AEROSOL	Apply as received in container
SPRAY (low pressure compressor type)	
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	4:1 ZRC:XXX Thinner -OR- 16:1 ZRC:Xylol/Xylene
SPRAY (airless type)	
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	ZRC XXX Thinner* or Xylol/Xylene

\* XXX Thinner is our special solvent.



ZRC Worldwide has been registered 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.