



ATLANTA WAREHOUSE
3939 Royal Drive, Suite 139
Kennesaw, GA 30144

UTAH WAREHOUSE
647 West Billinis Road, Unit 1
Salt Lake City, Utah 84119

ChemWorld ZR Poly Seal

Nanotechnology Sealing Rinse for Outstanding Paint Adhesion and Corrosion Resistance on Steel, Galvanized, and Aluminum Substrates

ChemWorld ZR Poly Seal is a clear nanotechnology coating formulated for both outstanding corrosion inhibition and superior paint adhesion on ferrous metals, aluminum, and galvanized substrates. The imperceptible coating contains a blend of organic and inorganic polymeric compounds which naturally and permanently bond with clean metal without changing the outward appearance and brightness of the substrate. In many cases, salt spray results and impact resistance can more than double over traditional non-chrome seals.

ChemWorld ZR Poly Seal provides superior paint adhesion and corrosion resistance to the applied paint finish over traditional phosphoric or phos/moly non-chrome sealing rinses. ChemWorld ZR Poly Seal seeks out and fills any voids in the primary phosphate coating. ChemWorld ZR Poly Seal does not contain regulated heavy metals, and is acceptable for almost any waste treatment facility or regional POTW. ChemWorld ZR Poly Seal is an excellent replacement to traditional phosphorus based coatings when phosphates can not be used or discharged.

PRODUCT PROPERTIES:

Appearance:	Clear, colorless liquid
Odor:	Nil
Specific Gravity:	1.02
pH (1%):	4.0 – 5.0
HMIS Rating:	2,0,0
Coating Weight:	5 – 8 mg-ft/2

USE INFORMATION:

Concentration:	Sealing of Phosphate Coating:	Target: 1.0% BV Range: 0.5 – 2.0%BV
	Stand Alone Coating:	Target: 2.0% BV Range: 1.0 – 2.5%BV
Temperature:	Ambient to 100°F.	
pH:	Range: 3.8 – 5.2 Target: 4.5 +/- 0.3	



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Contact Time: Range: 20 to 120-seconds
 Recommended: 30 to 90-seconds

Limitations: **FACTORING OUT PRODUCT:** Total Dissolved Solids should be kept below 400. DI or RO is recommended for extended tank life.

BATH PREPARATION:

- Charge bath with low conductivity water. (RO and/or DI highly recommended).
- Slowly add 75% of target amount while the recirculating pump is in operation.
- Manually adjust pH upward **ONLY** if below 3.5 (Using a 10% dilution of Sodium Hydroxide, 50%)
- Feed additional product based on pH.
- Bath titration should always be a minimum of 1% by volume.

MINIMUM RECOMMENDED SYSTEM:

Steel: Preclean, plus at least (1) low conductivity rinse

Aluminum: Preclean, plus an etch and/or deoxidizer stage, plus at least (1) low conductivity rinse. Etch can either be a properly applied caustic etch and/or fluoride etch.

Galvanized: Outdoor silicate coatings must be removed for optimal results! Preclean, plus an etch stage, plus at least (1) low conductivity rinse. Etch can either be a properly applied aggressive caustic etch and/or fluoride etch.

Combination: Follow recommendations for galvanized metal.

PRECAUTIONS:

May cause irritation to the eyes upon contact. ****AVOID CONTACT**** FOR INDUSTRIAL & COMMERCIAL USE ONLY! (Observe all local, state, and federal discharge regulations).

STANDARD PACKAGING SIZES: Bulk, 330 + 275 gal, 55 gal, 30 gal, 15 gal, and 5 gal. containers.
OPTIONAL: Private labeling. Bulk container packaging from 1 oz to 5 gallons.