

CORCHEM[®] 94 INORGANIC ZINC

GENERIC	Proprietary high ratio alkali metal silicate polymer and zinc powder mixture that cures by water evaporation into an insoluble zinc silicate matrix.
DESCRIPTION	Inorganic zinc primer modeled after National Aeronautics and Space Administration (NASA) technology and Bureau of Ships Specification MIL-P-23236 Class III designed to provide electrolytic protection similar to galvanizing for steel surfaces, which will be exposed to severe chemical and physical environments. It is formulated to have excellent adhesion, hardness, toughness, impact and abrasion resistance properties. The cured film conforms to United States Department of Agriculture requirements for incidental food contact.
USE	Provides, a high degree of protection for steel against moisture, corrosive fumes and chemical contact. The principal use is in corrosive water-chemical problem areas. Suggested as a general purpose, corrosion resistant protective primer. Intended for use in both shop and field operations in combination with topcoats such as CORCHEM [®] 139, 140, 181, 204, 209, 235, 260, 283, MCTHANE [™] 150, and many other CORCHEM [®] products.
SERVICE LIMITATIONS	Temperature resistance up to 750°F (dry) depending upon the individual exposure. Do not use in contact with strong acids or alkalis. Certain exposures will require topcoats. CONTACT CORCHEM [®] FOR SPECIFIC RECOMMENDATIONS BEFORE PROCEEDING for immersion service and exposure to corrosive chemicals.
COLORS	Gray
FINISH	Flat Gloss.
VOLUME SOLIDS	65% (void content method).
DRY COVERAGE	Theoretical (no loss): 1040 sq. ft. per gallon for one mil (.001). When computing coverage allow for application loss and surface irregularities.
DRY FILM THICKNESS	1.0 to 5.0 mils per coat.
COMPONENTS	Two.
POT LIFE	8 hours @ 70°F (mixed one-gallon kit).
VOC CONTENT	0 gms/l or 0.0 lbs/gal. Conforms to United States National Volatile Organic Compound Emission Standards.
THINNER	Water. Thin only as required for proper application.
APPLICATION METHODS	Air or airless spray and brush (small areas).
TEMPERATURES	Apply at 35°F to 125°F (Air and Surfaces) and 5°F above the dew point. Sudden and/or substantial temperature change during curing process can cause film defects.

RELATIVE HUMIDITY	0% to 85%.
CURING TIME	Topcoat 12 hours @ 70°F (refer to RECOAT AND REPAIR Section if subjected to extended weather exposure). Final cure is 3 days @ 70°F. Curing times are significantly shorter for higher temperatures or lower thickness and longer for lower temperatures or higher thickness. Curing times are affected by the method of application; the quantity of water used; the amount of ventilation and air circulation; relative humidity; etc.
NOTICE!	Heat curing may be used to increase drying speed and resistance properties. Contact CORCHEM® for instructions and heat cure times.
PACKAGING	1 gallon & 5 gallon premeasured packaged kits.
SHELF LIFE	1 year from shipment date protected between 40°F and 100°F.
DOT/FLASH POINT	Non-Flammable Liquid Classification.
PERFORMANCE DATA	Contact CORCHEM® for desired information.
SURFACE PREPARATION	Round off sharp edges and rough welds. Burrs and weld spatter should be completely removed. Surfaces must be clean, dry and free of any dirt, chalk, grease, oils, salts, and deleterious materials before application is performed. Vacuum the topside of all horizontal and sloped surfaces.
CARBON STEEL	Immersion or Severe Exposures: SSPC-SP-10 (Near-White Blast Cleaning). Mild Exposures: SSPC-SP-6 (Commercial Blast Cleaning). Metal surfaces should have an anchor profile of one to three mils.
WELDING	Welding should precede coating. If already coated, follow instructions in U.S.A. Standard Z49.1 Safety in Welding and Cutting.
APPLICATION MIXING	All equipment should be cleaned and flushed with Water. Slowly add Component A (zinc powder) into Component B (liquid) while agitating with power mixer at low speed. Do not reverse order or vary proportions. Power stir, until completely mixed and continue agitation during application. Strain mixed material through a 30-mesh screen. <u>Do not allow mixed material to stand in equipment after use!</u> Clean immediately with Water.
APPLY	In an even wet coat. Ensure seams and irregularities are completely covered. Keep material pot at the same level or higher than spray gun. Application below minimum or above maximum suggested dry film thickness ranges might adversely affect performance.
RECOAT AND REPAIR	Remove salts and contaminants, if material has been subjected to extended weather exposure. Uniformly abrade the surface and feather the edges. The surface must be roughened sufficiently to provide a profile adequate to ensure a mechanical bond.
TOPCOAT	Use of a thin or "mist" coat prior to regular application may be needed to reduce pinholing and/or blistering. Finish or topcoats may require a special tie or barrier coating.
INSPECTION	Check for desired dry film thickness and for pinholes, holidays, bare areas, etc. before placing in operating service.
AIRLESS SPRAY	Graco or equal. Pump ratio 30:1 or higher, 206-718 gun with fluid tip of .021" or larger orifice size with Tungsten Carbide Reverse-A-Clean tip, 3/8" I.D. or larger high pressure solvent resistant fluid line, 1/2" I.D. or larger air supply line. Continuous air source capable of 80 to 100 psi inbound pressure at pump.

CONVENTIONAL SPRAY

Binks or equal. Bottom fluid outlet pressure, material pot with mechanical agitator, dual regulators, air-gages, and oil and moisture separators. No. 18 gun (external mix), 66SS fluid nozzle, 65N fluid needle, 67 PB air cap, heavy-duty fluid spring, Teflon fluid packing, 1/2" I.D. or larger high solvent resistant fluid line and 3/8" I.D. or larger air-supply line. Continuous air source capable of 20 cfm or more at 80 psi per nozzle and 60 psi to the pot.

GENERAL

Regulate pressure as required for proper application. Proportionally adjust pressure higher for smaller hose diameter and/or longer hose length and adjust pressure lower for larger hose diameter and/or shorter hose length. Select tip angles and orifice diameters according to application needs.

BRUSH

Short hair or natural bristle.

CLOTHING

Wear protective garments, shoes, goggles, and filter masks. Use protective barrier creams on exposed skin areas.

TANKS & VESSELS

Wear properly fitted appropriate NIOSH/MSHA approved fresh air respirator such as MSA or equal with 1/4" I.D. or larger air supply line connected directly to proper air source during and after application unless air monitoring demonstrates vapor/mist levels are within safe limits. Use suction type exhaust fans and blowers. **CAUTION!** Air circulation and exhausting of vapors must be continued until the coatings have fully cured.

SAFETY INFORMATION

THIS PRODUCT CONTAINS METALLIC ZINC COMPOUNDS. DO NOT USE IF YOU HAVE HAD A REACTION TO THESE MATERIALS.

WARNING! VAPOR HARMFUL! CAUSES SEVERE EYE AND SKIN BURNS. MAY CAUSE SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES. HARMFUL OR FATAL IF SWALLOWED!

Use only with adequate ventilation. Prevent breathing of vapor or spray mists. Wear a properly fitted appropriate respirator during application and until all vapors and spray mists are gone. **DO NOT USE IF YOU HAVE CHRONIC LUNG OR BREATHING PROBLEMS.** Prevent contact with eyes and skin. Do not take internally. Keep closures tight and upright to prevent leakage. Keep container closed when not in use. In case of spillage, absorb and dispose of in accordance with local applicable regulations. **FIRST AID:** In case of skin contact, wash thoroughly with soap and water; for eyes, flush immediately with plenty of water for 15 minutes and call a physician. Remove and wash contaminated clothing before reuse. (Discard contaminated shoes). If inhaled, remove to fresh air. If breathing difficulty persists or occurs later, consult a physician and have label and MSDS information available. If swallowed, **CALL A PHYSICIAN IMMEDIATELY. DO NOT INDUCE VOMITING.**

IN CONFINED SPACES AND TANKS OBEY SPECIAL SAFETY AND EQUIPMENT INSTRUCTIONS!

FOR INDUSTRIAL USE BY PROFESSIONAL APPLICATORS ONLY. NOT INTENDED FOR SALE TO THE GENERAL PUBLIC. This product should not be sold or delivered to any person under 18 years of age. KEEP OUT OF THE REACH OF CHILDREN! IF, FOR ANY REASON, ADDITIONAL PRODUCT AND SAFETY INFORMATION, INSTRUCTIONS OR EXPLANATIONS ARE NEEDED, CONTACT CORCHEM® IMMEDIATELY!

LIMITED WARRANTY

WARRANTY & LIMITATION OF SELLER'S LIABILITY: CORCHEM® CORPORATION warrants only that its coatings represented herein meet the formulation standards of CORCHEM® CORPORATION.

THE ABOVE WARRANTY SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTIONS ON THE FACE HEREOF.

The buyer's sole and exclusive remedy against CORCHEM® CORPORATION shall be for replacement of the product in the event, a defective condition of the product should be found to exist. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE BUYER. The sole purpose of this exclusive remedy shall be to provide buyer with replacement of the product if any defect in materials is found to exist. This exclusive remedy shall not be deemed to have failed its essential purpose so long as CORCHEM® CORPORATION is willing and able to replace the defective materials.

Technical and application information is provided for the purpose of establishing a general profile of the coating and proper coating application procedures. Test performance results were obtained in a controlled environment and CORCHEM® CORPORATION makes no claim these tests or any other tests, accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating.

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