

PRODUCT DESCRIPTION

Generic: Organic Zinc Rich Primer

General Description: A high performance, two component, organic zinc-rich primer for the interior and exterior of potable water tanks.

Typical Uses: Ideal for cathodic protection of steel structures, tanks, equipment, piping and other steel surfaces exposed in mild to severe industrial environments. Also ideal for touch-up and maintenance work because of its easy application, wide compatibility and fast dry-to-recoat.

Special Qualifications: ANSI/NSF Standard 61 certified for potable water.



ANSI/NSF 61
DRINKING WATER SYSTEM COMPONENTS
10RP

For use with tanks $\geq$ 1000 gallons, not exceeding a surface area to volume ratio of 33 cm²/L

SPECIFICATION DATA

Color: Light Green (316K5150)

Finish: Flat

Reduction Solvent: T-10 Thinner, Use only T-5 Thinner for potable water.

Clean-up Solvent: T-10 Thinner

Weight/Gallon: 27.9 lbs./gal. (3.35 kg/L)

VOC: (EPA 24) 2.01 lbs./gal. (241 g/L)

Solids By Volume: (ASTM D 2697-7days): 74%

Theoretical Coverage at 1.0 Mil Dry: 1187 sq. ft./gal. (29.6 m²/L)

Recommended Film Thickness: 2.5-3.5 mils (63-88 microns) dry – 3.4-4.7 mils (85-118 microns) wet

Systems: Please consult the appropriate system guide, the particular job specification or your ICI Paints' Representative for proper systems using this product. Systems must be selected considering the particular environment involved.

Service Temperature Limits: 400°F (193°C) dry, intermittent

Minimum Dry Time (ASTM D 1640): At 3 mils (75 microns) DFT

Substrate Temperature	40°F (4°C)	77°F (16°C)	90°F (27°C)
Minimum Recoat Dry Hard	5 Hours 20 Hours	2 Hours 5 Hours	1 Hour 2 Hours
Maximum Recoat			
Self	90 Days	90 Days	90 Days
224HS	14 Days	14 Days	14 Days
231, 233H, 236, 223	90 Days	90 Days	90 Days
235	60 Days	60 Days	60 Days
Devthane 359,369,389	15 Days	10 Days	7 Days
Devthane 378, 379	10 Days	7 Days	3 Days

Ventilation, film thickness, humidity, thinning and other factors can influence the rate of dry.

Warning: The above table provides general guidelines only. Always consult your ICI Paints' Representative for appropriate recoat windows since the maximum aged recoat time of this product may be significantly shortened or lengthened by a variety of conditions, including, but not limited to humidity, surface temperature, and the use of additives or thinners. The use of accelerators or force curing may shorten the aged recoat of individual coatings. The above recoat windows may not apply if recoating with a product other than those listed above. If the maximum aged recoat window is exceeded, please consult your ICI Paints' Representative for appropriate recommendations to enhance adhesion. Failure to observe these precautions may result in intercoat delamination.

Shelf Life: Over 24 months at 77°F (25°C) – unopened

Hardness (ASTM D 3363, 7 day cure @ 77°F (25°C): 6H

Mix Ratio By Volume: 9 (base): 1 (converter) – see mixing instructions.

Induction: 15 minutes minimum below 60°F (16°C) – see mixing instructions.

Pot Life: 8 hours @ 77°F (25°C) & 50% R.H.

Percent Zinc Content: 83% $\pm$ 2% in dry film

FEATURES

Advantages:

- Exceptional corrosion resistance
- Provides cathodic protection
- Easy to mix
- Zinc premixed in base component
- Fast dry to handle and recoat
- Accepts a wide variety of topcoats for severe exposures
- Formulated without lead, chromate, or mercury components

Limitations of Use: Do not topcoat with alkyd or alkyd-urethane coatings. Not suitable for solvent or chemical immersion.

PERFORMANCE DATA

Salt Spray Resistance (ASTM B 117) – Excellent

Direct Impact Resistance (ASTM D 2794) – Good

Humidity Resistance (ASTM D 4585) – Excellent

Water Immersion (ASTM D 1308) – Excellent

GENERAL SURFACE PREPARATION

All surfaces must be sound, dry, clean and free of oil, grease, dirt, mildew, form release agents, curing compounds, loose and flaking paint and other foreign substances, and be structurally sound. Round off welds and sharp edges and remove weld splatter.

New Surfaces: Steel – Abrasive blast to minimum SSPC-SP6, (ISO-Sa2) for exterior service. For immersion service blast to a minimum SSPC-SP10 (ISO-Sa2½). The blast profile should be jagged rather than “peened” and between 1.5 to 2.5 mils (38-62 microns). After blasting, vacuum or blow off all abrasive dust and ensure surface remains clean before painting.

Previously Painted Surfaces: Remove old paint to bare metal. Prepare surface and prime as for new steel.

DIRECTIONS FOR USE

Tinting: Do not tint.

Thinning: Thinning is not normally required or desirable. However, at lower temperatures, small amounts (10% or less) of T-10 Thinner can be added to the mixed components depending on local VOC and air quality regulations. Do not thin with T-10 for potable water immersion service. If thinning is required for potable water service use only T-5 up to a maximum of 5%.

Mixing: CATHA-COAT 316 Primer is supplied in a 3 gallon kit which contains the proper ratio of ingredients. The entire contents of each container must be mixed together. The zinc metal is ready-mixed in the base portion. Stir thoroughly with a slow speed mixer while slowly adding the converter. Continue to mix at slow speeds to a homogeneous condition. At temperatures of 60°F (16°C) or above, allow a 15 minute induction time before using. Add about 10 minutes for each 10°F (6°C) lower temperature. The pot life, 8 hours at 77°F (25°C), will be longer at lower temperatures and shorter at higher temperatures.

Application: Spray, roller or brush. Use brush and roller primarily for touch-up and repair. Brushing and rolling may require multiple coats to achieve correct film thickness and/or hiding. Spray is preferred for uniform film build. Use agitated spray pots. For air spray, use .070” or larger tip, 15 psi fluid pressure, fluid hose 1/2” I.D. and maximum 50 ft. length. For airless spray use a sprayer capable of 3,000 psi (207 bars) and able to support a .025” diameter tip, fluid hose 3/8” I.D. and

maximum 50 ft. length. Pressure pots or pumps should be at same level or above spray guns. Keep fluid pressures to minimum. Rough or heavily pitted steel requires higher (or increased) dry film thickness for optimum protection. Care should be taken to ensure that proper film thicknesses are applied.

Spreading Rate: Apply at 339-475 sq.ft. per gallon (8.3-11.7 m²/L) depending on surface texture and porosity. Make allowances for any losses due to overspray or surface irregularities.

Ventilation: It is very important for the safety of the applicator and the proper performance of the CATHA-COAT 316 primer that good ventilation be provided to all portions of the enclosed area. It is equally important to bring into the enclosed area dry, fresh air to remove all solvent vapors. Since all solvent vapors are heavier than air, ventilation ducts should reach to the lowest portions of the enclosed areas as well as into any structural pockets. Ventilation should be provided throughout the cure period to insure all the solvents are removed from the coating.

Topcoats: CATHA-COAT 316 may be readily recoated by itself for easy touch-up. May be topcoated with DEV-RAN® or BAR-RUST® Epoxy Coatings or DEVTHANE® Urethanes. No tie coat is required before applying finish coat. Do not topcoat with alkyd or alkyd-urethane coatings.

Dry Time: At 77°F (25°C) & 50% R.H., dries to recoat in 2 hours; hard 5-6 hours.

Clean-up: Use T-10 Thinner.

PRECAUTIONS

DANGER! FLAMMABLE LIQUID AND VAPOR. CORROSIVE. CAUSES EYE AND SKIN BURNS. HARMFUL OR FATAL IF SWALLOWED. ASPIRATION HAZARD - CAN ENTER LUNGS AND CAUSE DAMAGE. HARMFUL IF INHALED. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS, INCLUDING DIZZINESS, HEADACHE OR NAUSEA. CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION. OVEREXPOSURE MAY CAUSE BLOOD, LIVER, KIDNEY, DAMAGE. USE ONLY WITH ADEQUATE VENTILATION. KEEP OUT OF THE REACH OF CHILDREN. NOTICE: Products in this series contain solvents. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. For emergency information call (800) 545-2643. **Note: These warnings encompass the product series. Prior to use, read and follow product-specific MSDS and label information.** Keep away from heat, sparks and flame. **Do not smoke.** Vapors may ignite. Extinguish all flames, burners, stoves, heaters and pilot lights and disconnect all electrical motors and appliances before use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. If sanding is done, wear a dust mask to avoid breathing of sanding dust. Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. Avoid contact with eyes and skin. If you experience eye watering, headaches, or dizziness, leave the area. If properly used, a respirator may offer additional protection. Obtain professional advice before using. Close container after each use. **FIRST AID:** In case of skin contact, wash thoroughly with soap and water. If any product remains, gently rub petroleum jelly, vegetable or mineral/baby oil onto skin, then wash again with soap and water. Repeated applications may be needed. Remove contaminated clothing. For eye contact, flush **immediately** with large amounts of water, for at least 15 minutes. **Obtain emergency medical treatment.** If swallowed, **obtain medical treatment immediately.** If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, **get medical help. KEEP FROM FREEZING.**

DS378-0504

SHIPPING

Flash Point: 80°F (27°C)
Packaging: 3 gallon (11.35L)

Shipping Weight: 3 gallon - 80 lbs. (36 kg)

316K5150 (02/05)
Ad Stock #67093



ICI Paints
Cleveland,
Ohio, U.S.A.
800-654-2616
www.devoecoatings.com

LIMITATION OF LIABILITY: To the best of our knowledge, the technical data contained herein are true and accurate at the date of issuance but are subject to change without prior notice. We guarantee our product to conform to the specifications contained herein. WE MAKE NO OTHER WARRANTY OR GUARANTEE OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. Liability, if any, is limited to replacement of the product or refund of the purchase price. LABOR OR COST OF LABOR AND OTHER CONSEQUENTIAL DAMAGES ARE HEREBY EXCLUDED.