

PRODUCT DESCRIPTION

Generic: Solvent based ethyl silicate

General Description: CATHA-COAT 304V Zinc Coating provides cathodic protection properties to all high performance coating systems.

Typical Uses: Ideal for protection of steel structures found in such places as pulp and paper mills, sewage and waste treatment plants, chemical processing plants, refineries, and for bridge and tank coatings.

Special Qualifications: Meets Class B slip and creep for faying surfaces. Meets SSPC Paint 20 requirements.

SPECIFICATION DATA

Color: Gray (304V0200)

Finish: Flat

Reduction Solvent: Cold weather: T-5 Thinner.
Warm weather: T-9 Thinner.

Clean-up Solvent: T-9 Thinner

Weight/Gallon: 27.6 lbs./gal. (3.31 kg/L)

VOC: (EPA 24) 2.59 lbs./gal. (311 g/L)

Solids By Volume: 81% (wet/dry method)

Theoretical Coverage at 1.0 Mil Dry: 1299 sq. ft./gal. (32.4 m²/L)

Recommended Film Thickness: 2.0-4.0 mils (50-100 microns) dry – 2.5-5.0 mils (62.5-150 microns) wet. Dry film thickness in excess of 6 mils (150 microns) per coat is not recommended.

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: 750°F (400°C) dry

Minimum Dry Time (ASTM D 1640): At 3 mils (75 microns) DFT & 50% R.H.

At 60% Relative Humidity minimum

Substrate Temperature	40°F (4°C)	60°F (16°C)	80°F (27°C)
Minimum Recoat	10 Days	3 Days	18 Hours
Dry Hard	>7 Days	48-72 Hours	24-36 Hours
Maximum Recoat			
Self	14 Days	14 Days	14 Days
201, 220, 231, 235	30 Days	30 Days	30 Days
224HS	14 Days	14 Days	14 Days

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: 6 months at 77°F (25°C) – unopened

Pot Life: 6 hours @ 77°F (25°C) & 50% R.H.

Percent Zinc Content: 84% ± 2% in dry film.

FEATURES

Advantages:

- Conductive zinc rich primer
- Pure ethyl silicate binder
- Optimum ratio of powdered zinc metal to inorganic silicate binder
- Excellent dry properties at low temperatures
- Excellent dry properties at high temperatures
- Solvent based
- Compatible with most high performance coatings systems
- Heat resistant
- Totally inorganic
- Limited only by the melting point of zinc

Limitations of Use: Do not topcoat with alkyds or alkyd-urethane coatings.

PERFORMANCE DATA

Salt Spray Resistance (ASTM B 117) 1000 hours – Excellent

Humidity Resistance (ASTM D 2247) – Excellent

Adhesion (ASTM D 4511) 30 day cure – Excellent

GENERAL SURFACE PREPARATION

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

New Surfaces: Steel – Blast to near-white metal equivalent to SSPC-SP10, (ISO-Sa2½). The steel profile after blasting should be 1.5 to 2.5 mils (38-62 microns) in depth and of a jagged nature as opposed to a peen pattern. Surfaces must be free of grit dust. Primer should be applied to cleaned surfaces as soon as possible to prevent rusting or contamination. CATHA-COAT 304V Zinc Coating is compatible with alternate surface preparations such as wet blasting, pickling and chemical treatments. There must, however, always be a surface roughness to obtain maximum adhesion. Consult your ICI Paints' Representative if alternate surface preparations are planned.

Representative if alternate surface preparations are planned

Previously Painted Surfaces: Old coatings must be removed and profile established as in **New Surfaces**.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

DIRECTIONS FOR USE

Tinting: Do not tint.

Thinning: Thinning is not normally required or desirable. However, under hot and windy conditions, the slow evaporation rate of T-9 Thinner may help to prevent "dry spray". During cold weather application, T-5 Thinner will help speed up the dry. Do not add more than 5% thinner depending on local VOC and air quality regulations. Keep containers closed and free of moisture.

Mixing: CATHA-COAT 304V Zinc Coating is supplied in two-component kits comprised of a liquid portion and a dry powdered metal portion. The two components, when mixed together, make up a 5 gallon or 1 gallon unit.

The powder portion should be added to the liquid portion slowly while agitating with a power mixer at low speeds. After the powder add is complete, mix well at higher speeds. Always filter through a wire screen 30 to 60 mesh or equivalent before spraying to insure removal of any powdered zinc agglomerates.

Application: Spray application is preferred. **Conventional Spray Application:** Use suitable pressure pot with mechanical agitator and dual regulators for air and fluid. Use a DeVilbiss P-MBC gun with 64E needle and tip combination or equivalent equipped with heavy duty spring and leather packings; 50 ft. length fluid hose, minimum 1/2" ID; 50 ft. length air hose, minimum 5/16" ID. Air supply minimum should be 80 psi (5.5 bars) at spray gun nozzle. Suitable in-line moisture

traps and oil separators are needed to provide clean dry air to pressure pot and spray gun. **Airless Spray Application:** Use at least a 33:1 ratio airless pump, such as a Graco Bulldog with a Dura-flo 750 pump. Teflon/poly packings are recommended. Recirculating lines are recommended for spraying zinc through airless equipment. Use a 50 ft. 3/8" diameter ID airless hose. An air assisted airless spray gun fitted with a .031" -.033" heavy duty Reverse-A-Clean tip is recommended. Fluid pressure should be regulated to provide a proper spray pattern. Normally this is 2000 psi or below. Higher pressures may result in tip packing.

Spreading Rate: Apply at 324-649 sq.ft. per gallon (8.1-16.2 m²/L) depending on surface texture and porosity. Make allowances for any losses due to overspray or surface irregularities.

Topcoats: May be topcoated with most high performance coatings systems.

Note: Cure and hardness of the coating is a function of the moisture content in the air. At low humidity, curing time may be reduced by using steam or water mist on the coated surface.

A "mist coat" may be required to minimize topcoat bubbling.

Dry Time: At 77°F (25°C) & 50% R.H., dries to recoat overnight.

Clean-up: Use T-9 Thinner.

PRECAUTIONS

DANGER! FLAMMABLE LIQUID AND VAPOR. CAUSES EYE 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 SKIN AND RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. OVEREXPOSURE MAY CAUSE CARDIAC, BLOOD, LIVER, KIDNEY, REPRODUCTIVE SYSTEM DAMAGE. CONTAINS CRYSTALLINE SILICA WHICH CAN CAUSE LUNG CANCER AND OTHER LUNG DAMAGE IF INHALED. 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. 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.**

DS242-1100

SHIPPING

Flash Point: 60°F (15.6°C)

Packaging: 1 gallon kit (3.785L)
0.64 gallon base
0.36 powder

5 gallon kit (18.925L)
3.2 gallons base
1.8 powder

Shipping Weight: 4-1 gallon kits - 117 lbs. (53.5 kg)
5 gallon kit - 145 lbs. (66.2 kg)

304E0200/304P0295 (8/03)
Ad Stock #68652D



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

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