

PRODUCT DESCRIPTION

Generic: Solvent based ethyl silicate

General Description: CATHA-COAT 304L is a fast drying, heavy duty, permanent primer for all high performance coating systems designed to protect steel structures in severe service.

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. Fast drying properties make Catha-Coat 304L ideal for use in fabrication shops.

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

SPECIFICATION DATA

Color: Gray-Green (304K0650)

Finish: Flat

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

Clean-up Solvent: T-9 or T-10 Thinner

Weight/Gallon: 21.1 lbs./gal. (2.53 kg/L)

VOC: 3.35 lbs./gal. (402 g/L)

Recommended Film Thickness: 2-3 mils (50-75 microns) dry – 3-5 mils (75-125 microns) wet. Dry film thicknesses 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 & 60% R.H.

At 60% Relative Humidity minimum

Substrate Temperature	40°F (4°C)	60°F (16°C)	80°F (27°C)
Minimum Recoat	2 Days	24 Hours	18 Hours
Dry Hard	1 Hour	45 Minutes	45 Minutes
Maximum Recoat Self	7 Days	7 Days	7 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: at 77°F (25°C) – unopened

Binder - 9 months

Zinc Dust - 2 years

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

Percent Zinc Content: 84 +/- 2% in dry film

FEATURES

Advantages:

- Outstanding cathodic corrosion protection
- Contains high levels of zinc metal
- Rapid dry properties at low temperatures and high humidities
- VOC compliant in certain areas
- May be applied with both conventional and airless spray equipment
- Extended pot life
- Compatible with most high performance coatings systems

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 a minimum SSPC-SP6 or ISO-Sa2 for atmospheric service. For immersion service blast to a minimum SSPC-SP10 or ISO-Sa2. The steel profile after blasting should be 1½ to 3 mils (38-75 microns) in depth. For optimum surface profile, blast clean all surfaces using sharp, angular abrasives. Surfaces must be free of grit dust. Primer should be

applied to cleaned surfaces as soon as possible to prevent rerusting or contamination. CATHA-COAT 304L 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.

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

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 Devoe T-9 Thinner may help to prevent "dry spray". During cold weather application, Devoe 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 304L 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: Conventional Spray Application: Use suitable pressure pot with mechanical agitator and dual regulators for air and fluid, Graco 220-230 (5 gallon) or equal. Use a Graco P-800 gun with 04Z needle/nozzle, air cap combination equipped with 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, 25 CFM at spray nozzle. Use suitable in-line moisture traps and oil separators 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.

Surface temperature for application should be 0°F-120°F.

Spreading Rate: Apply at 331-497 sq.ft. per gallon (8.1-12.2 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.

Dry Time: At 77°F (25°C) & 60% R.H., dries to recoat overnight.

Notes: Cure and hardness of the coating is a function of the moisture content in the air. At low humidities, 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.

Clean-up: Use T-9 or T-10 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. OVEREXPOSURE MAY CAUSE CARDIAC, BLOOD, LIVER, KIDNEY, REPRODUCTIVE SYSTEM DAMAGE. CONTAINS MICA WHICH MAY CAUSE PNEUMOCONIOSIS. 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.**

DS340-1003

SHIPPING

Flash Point: 60°F (15.6°C)

Packaging: 1 gallon kit (3.785L)
0.76 gallon base
0.24 powder

5 gallon kit (18.925L)
3.8 gallons base
1.2 powder

Shipping Weight: 4-1 gallon kits - 94 lbs. (42.7 kg)
5 gallon kit - 116 lbs. (52.7 kg)

304L0650/304P0297 (01/05)
Ad Stock #67051C



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

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