

# **VpCI®-392 Urethane Dispersion Topcoat**

#### **DESCRIPTION**

VpCI®-392 is a fast drying, water-based urethane dispersion one coat system (topcoat) that can be applied DTM (Direct to Metal) and provides protection in harsh, outdoor, unsheltered applications. The complex mixture of non-toxic, organic inhibitors offers protection that competes with most paints and zinc-rich primers. Provides multi-metal protection. Excellent UV resistance. Can be matched to most custom colors.

#### **PACKAGING & STORAGE**

VpCl®-392 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) metal drums, liquid totes, and bulk. Keep product from freezing.

Product shelf life is 1 year.



## **CHARACTERISTICS/TECHNICAL DATA**

Volume Solids	34.10%
Gloss (ASTM D532)	80+
VOCs (ASTM D3960)	1.1 lbs/gal (132 g/l)
Viscosity	18-28 sec+ Zahn#2
Pencil Hardness (ASTM D3363)	H-2H
Spreading Rate	546 sq.ft/gal @ 1.0 mils DFT (13.4 sq.m/l @ 25 μm)
Weight per Gallon	8.34 lbs/gal (1.00kg/l)
Flash Point	>200°F (93°C)
Recommended DFT	1.0-2.0 mils (25-50 μm)
Recommended WFT	2.9-5.8 mils (74-145 μm)
Dry to Touch	30-40 min
Dry to Handle	1-2 hrs
Recoat Time	Dry to touch - 72 hrs, sand thereafter
Force Dry	15-20 min @ 150°F (65°C)
Full Cure	3-7 days
Salt Spray (ASTM B117)	200 hrs
Humidity (ASTM D1748)	1000 hrs
Adhesion (ASTM D3359)	5B
Flexibility (ASTM D522)	1/2" mandrel (1.27cm)

<sup>\*</sup>All tests performed after a 7 day cure at ambient temperature

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#### **APPLICATION**

## **Surface Preparation**

Substrate should be free of grease, oil, dirt, fingerprints, drawing compounds, rust inhibitors, or any other surface contamination that could affect adhesion. For production line applications, use VpCI®-440 or similar phosphatizing pre-treatment. For structural steel applications, Cortec® recommends a minimum of a NACE #3/ SSPC-SP6 commercial blast clean. Consult Cortec® Technical Service and/or test system adhesion prior to full scale application.

A wash primer such as VpCl®-373 green applied at 0.5-1.0 mils (12.5-25 microns) is recommended before applying the VpCl®-392 to aluminum, galvanized or plated substrates. Other recommended primers include VpCl®-375, 395 and 396 depending on coating requirements.

Note: Make sure dew point is more than 5°F (2°C) less than air temperature for application. Power agitate to a uniform consistency using a "squirrel cage" type mixer, hand-held drill mixer, or other equivalent method. VpCI®-392 can be applied by spray, roll, brush, or dip.

## **Typical Equipment Setups**

## **HVLP / Conventional Spray**

- Tip .009"-.021" \*dependent upon pressures and viscosity
- Air Pressure 45-55 psi
- Fluid Pressure 10 psi
- Fluid hose should be 3/8" (0.95 cm) I.D. with a maximum length of 50 feet (15.2 m). Pot should always have dual regulation and be kept at same elevation as spray gun.

#### **Air Assisted Airless / Airless**

- Tip .015"-.035" \*dependent upon pressures and viscosity
- Pressure 1800-2500 psi
- Hose should be 3/8" (0.95 cm) I.D. minimum, but a ¼"
- (0.64 cm) I.D. whip end section may be used for ease of application. A maximum length of 100 feet (30.5 m) is suggested.

## Cleanup

Clean tools/equipment immediately after use with Butyl Acetate when paint is still wet. When dry, use Butyl Cellusolve or MEK. Follow mfg's safety recommendations when using any solvent.

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