



**CORTEC**  
CORPORATION

Environmentally Safe VpCI®/MCI® Technologies

# VpCI®-396Z Zinc Rich Moisture Cure Urethane Primer

## DESCRIPTION

VpCI®-396Z is a fast drying, solvent-based zinc rich moisture cure urethane one coat system (primer) 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 above and beyond normal zinc-rich primers. Available in aluminum color.

## PACKAGING & STORAGE

VpCI®-396Z is available in 1 gallon (3.8 liter) and 5 gallon (19 liter) pails. Partially used containers must be purged with nitrogen.

Product shelf life is 1 year.



## CHARACTERISTICS/TECHNICAL DATA

Volume Solids	70.3%
Gloss (ASTM D532)	15-25
VOCs (ASTM D3960)	2.1 lbs/gal (248 g/l)
Viscosity	57 sec+ Zahn#3
Pencil Hardness (ASTM D3363)	H-2H
Spreading Rate	1122 sq.ft/gal @ 1.0 mils DFT (27.5 sq.m/l @25 µm)
Weight per Gallon	24.38 lbs/gal (2.92 kg/l)
Flash Point	77°F (25°C)
Recommended DFT	2.0-3.0 mils (50-75 µm)
Recommended WFT	3.5-5.3 mils (88-130 µm)
Dry to Touch	1-2 hrs
Dry to Handle	2-3 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)	4000+ hrs
Humidity (ASTM D1748)	2000 hrs
Adhesion (ASTM D3359)	5B
Flexibility (ASTM D522)	1/2" mandrel (1.27cm)

\*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® and/or test system adhesion prior to full scale application.

A wash primer such as VpCI®-373 green applied at 0.5-1.0 mils (12.5-25 microns) is recommended before applying the VpCI®-396Z to aluminum, galvanized or plated substrates. When solvent based topcoats are applied over VpCI®-396Z, compatibility must be checked. Cortec® recommended topcoats include VpCI®-280, 380, 381, 386, 387, 390, 392, 382, and 384.

**Note: Make sure dew point is more than 5°F (2°C) less than air temperature for application. Humidity must be min. 20%, max. 80%.**

### 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 1/4" (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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