

# VpCI®-386 Water Based Acrylic Topcoat

## DESCRIPTION

VpCI®-386 is a fast drying, water-based acrylic 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. VpCI®-386 is weldable and can be used to keep surfaces corrosion-free prior to welding. Can be matched to most custom colors.

NSN 8030-01-481-8897 (clear only).

## PACKAGING & STORAGE

VpCI®-386 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) metal drums, liquid totes, and bulk.

Keep product from freezing (unless using winterized version).

Product shelf life is 1 year.



## CHARACTERISTICS/TECHNICAL DATA

Volume Solids	31%
Gloss (ASTM D532)	80+
VOCs (ASTM D3960)	0.6 lbs/gal (72 g/l)
Viscosity	50-60 sec+ Zahn #3
Pencil Hardness (ASTM D3363)	HB-H
Spreading Rate	497 sq.ft/gal @ 1.0 mils DFT (12.2 sq.m/l @ 25 µm)
Weight per Gallon	8.58 lbs/gal (1.03 kg/l)
Flash Point	>200°F (93°C)
Recommended DFT	1.5-3.0 mils (37.5-75 µm)
Recommended WFT	4.8-9.6 mils (120-240 µm)
Dry to Touch	30 min
Dry to Handle	1 hr
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)	168 hrs
Humidity (ASTM D1748)	1000 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®-386 to aluminum, galvanized or plated substrates. Other recommended primers include VpCI®-375, 395 and 396 depending on coating requirements. When solvent based topcoats are applied over VpCI®-386, compatibility must be checked.

*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®-386 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 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 water 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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