



**HIGH PERFORMANCE VpCI® COATINGS**

# VpCI®-386/386 Winterized Acrylic Primer/Topcoat



**PRODUCT DESCRIPTION**

VpCI-386 is a unique water-based acrylic primer/topcoat that successfully provides protection in harsh, outdoor, unsheltered applications. The complex mixture of non-toxic organic inhibitors offers protection that can compete with most paints and zinc-rich primers.

VpCI-386 is superior to many coatings with inorganic pigments because the resistance has been improved by replacing pigments and metal oxides with more effective organic corrosion inhibitors. The special combination of additives provides a composite polymer barrier that significantly retards the reaction of metal ionization. A protective film is adsorbed onto metal surfaces. It protects against corrosive electrolytes and aggressive environments; preventing corrosion.

VpCI-386 provides a fast-drying thixotropic coating that is resistant to sagging or running, forming a tough, non-flammable, protective barrier. This dry-to-touch film offers extended protection for outdoor or indoor conditions. Thermally stable when dried from -150°F to 350°F (-78°C to 180°C). The coating is ultraviolet resistant giving optimal outdoor performance without cracking or chipping upon prolonged exposure to sunlight.

VpCI-386 is also available in a cold weather version- VpCI-386 Winterized.

VpCI-386 Winterized was developed to withstand Freeze/Thaw damage during transportation in cold temperatures down to -0° (-18°C) passing 3 Freeze/Thaw cycles.

**FEATURES**

- Fast-drying, non-flammable
- UV resistant when dried
- Forms non-flammable, protective barrier
- Optimal outdoor performance
- Clear coating allows visual inspection of metal substrate
- NSN 8030-01-481-8897, standard VpCI-386 only

**METALS PROTECTED**

- Carbon steel
- Cast iron
- Aluminum
- Stainless steel
- Galvanized steel\*
- Copper

**APPLICATION**

VpCI-386/386 Winterized  
 These products can be used as a topcoat/primer. When solvent-based topcoats are applied over VpCI-386/386 Winterized, compatibility must be checked. These can also be used as a topcoat with Cortec® VpCI-374 as a primer.

**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.

\*Use a coat of VpCI-373 green before using VpCI-386 on galvanized.

**VpCI-386/386 Winterized**

**TEST DATA [at 2 mils (50 microns)] DFT\***

Test Method	SAE 1010 Carbon Steel	Aluminum
Salt Spray (ASTM B117)	168 hours	1000+ hours
Humidity (ASTM D1748)	1000+ hours	1000+ hours
QUV (ASTM G 53)	1000+ hours	1000+ hours

\*Dry Film Thickness



## TYPICAL PROPERTIES VpCI-386 Acrylic Primer Topcoat

Appearance	Liquid
Colors available	standard and custom colors
pH	8.5-9.7 (Neat)
Density*	8.0-10.5 lb/gal (0.96-1.26 g/l)
Non-volatile Content*	32-50%
Dry Film Thickness	1.5-3.0 mils (37.5-75 $\mu$ m) (per coat)
Theoretical Spread Rate*	187-374 ft <sup>2</sup> /gal @ 1.5-3 mils (4.6-9.3 m <sup>2</sup> /l @ 37.5-75 $\mu$ m)
Dry to Touch Time	30 minutes @ 77°F (25°C) (2 mils (50 $\mu$ m) DFT)
Fully Cured	7 days @ 77°F (25°C) 55% RH
Temperature Stability	45°F-90°F (7°C-32°C)
VOC (regulatory)	1.6-1.8 lb/gal (167-216 g/l)
VOC (actual)	0.6-0.8 lb/gal (72-96 g/l)
Viscosity	700-3,000 cps (6 rpm/#2)
Temperature Resistance (Fully Cured)	-150°F to 350°F (-78°C to 180°C)

\*varies per color

### PACKAGING AND STORAGE

VpCI-386 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) metal drums, liquid totes, and bulk. VpCI-386 Winterized is available in clear only. Do not store product in freezing temperatures.

## VpCI-386 Acrylic Primer/Topcoat Winterized

Appearance	Milky white liquid
Colors Available	Clear
pH	8.5-9.7 (Neat)
Density*	8.5-9.5 lb/gal (1.02-1.14 kg/l)
Non-volatile Content*	33-37%
Dry Film Thickness	1.5-3.0 mils (37.5-75 $\mu$ m) (per coat)
Theoretical Spread Rate*	187-374 ft <sup>2</sup> /gal @ 1.5-3 mils (4.6-9.3 m <sup>2</sup> /l @ 37.5-75 $\mu$ m)
Dry to Touch Time	40 minutes @ 77°F (25°C) (2 mils (50 $\mu$ m) DFT)
Fully Cured	7 days @ 77°F (25°C) 55% RH
Freeze/Thaw	3 Cycles @ 0°F (-18°C)
VOC (regulatory)	1.02 lb/gal (123 g/l)
VOC (actual)	2.21 lb/gal (265 g/l)
Viscosity	700-3,000 cps (6 rpm/#2)
Temperature Resistance (Fully Cured)	-150°F to 350°F (-78°C to 180°C)

### Conventional Spray

#### Manufacturer Gun Model Tip/Aircap Combination

DeVilbiss	MBC or JGA	704E
Binks	#18 or #62	66PE

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.

### Airless

#### Manufacturer Gun Model Tip/Aircap Combination

Graco	205-591	Bulldog
Binks	Model 500	Mercury 5C
DeVilbiss	JGN-501	QFA-519

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. Best results will be obtained using a 0.013"-0.017" (0.3-0.4 cm) tip at 1200-1700 psi (83-117 bar).

**Note:** Nylon or Teflon type packagings are available from pump manufacturer and are highly recommended.

**Note:** Similar equipment may be suitable.

### FOR INDUSTRIAL USE ONLY

**KEEP OUT OF REACH OF CHILDREN**

**KEEP CONTAINER TIGHTLY CLOSED**

**NOT FOR INTERNAL CONSUMPTION**

**CONSULT SAFETY DATA SHEET FOR MORE INFORMATION**

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4119 White Bear Parkway, St. Paul, MN 55110 USA  
Phone (651) 429-1100, Fax (651) 429-1122  
Toll Free (800) 4-CORTEC, E-mail info@cortecvci.com  
Internet <http://www.cortecvci.com>

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