



HIGH PERFORMANCE VpCI® COATINGS



# CorShield® VpCI®-386 HP Powered by Nano-VpCI®



## PRODUCT DESCRIPTION

VpCI-386 HP is the next generation of high performance water-based acrylic coatings that provides superior corrosion protection in harsh outdoor, unsheltered applications. The unique formulation contains a mixture of non-toxic inhibitors and pigments that offers extended coating protection which strongly competes with heavy metal zinc primers and paints.

VpCI-386 HP is much more effective than most conventional coatings because the corrosion resistance has been improved by replacing traditionally used toxic materials with more effective, non-toxic, heavy metal free corrosion inhibitors. This special combination of additives provides a composite polymer barrier that significantly retards the reaction of metal ionization by ion scavenging and passivation. The coating provides a protective long lasting film that is bonded onto the metal surface which defends against corrosive electrolytes and aggressive environments. It is recommended for a variety of applications especially where the use of toxic materials are of concern.

VpCI-386 HP provides a fast-drying primer/topcoat film that forms a tough, non-flammable, protective barrier that was developed to protect in both indoor and outdoor conditions. The product is thermally stable when dried and is UV (ultraviolet) resistant giving optimal outdoor performance without cracking, yellowing, or chipping upon prolonged exposure to sunlight.

## 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
- Out performs in corrosion protection over conventional water based and solvent based coatings

## METALS PROTECTED

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

## APPLICATION

VpCI-386 HP can be used as a topcoat/primer. When solvent-based topcoats are applied over VpCI-386 HP, compatibility must be checked. VpCI-386 HP 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 HP can be applied by spray, roll, brush, or dip.

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



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

Test Method	SAE 1010 Carbon Steel	Aluminum
Salt Spray (ASTM B117)	500+hours	1000+hours
Humidity (ASTM D1748)	1000+hours	1000+hours
QUV (ASTM G 53)	1000+ hours	1000+hours

\*Dry Film Thickness

### 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

## 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**

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 packing are available from pump manufacturer and are highly recommended.**

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

## PACKAGING AND STORAGE

VpCI-386 HP is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) metal drums, liquid totes, and bulk. Keep product from freezing.

## TYPICAL PROPERTIES

### VpCI-386 HP

Appearance	Uniform water emulsion
Available Colors:	White, Grey, Yellow, Clear
pH	8.5-9.5 (Neat)
Density	8.4-10.2 lb/gal (1.01-1.22 kg/l)
Non-volatile Content	33-46%
Dry Film Thickness	1.5-3.0 mils (37.5-75 µm) 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 µm)
Dry to Touch Time	40 minutes @ 77°F (25°C) (2 mils (50 µm) DFT)
Fully Cured	7 days @ 77°F (25°C) 55% RH
Temperature Stability	45°F-90°F (7°C-32°C)
VOC (regulatory)	0.75-1.33 lb/gal (78-160 g/l)
VOC (actual)	0.25-0.67 lb/gal (30-80 g/l)
Viscosity	700-2,000 cps (6rpm #3)
Temperature Resistance (Fully Cured)	-150°F to 350°F (-78°C to 180°C)

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