



**HIGH PERFORMANCE VpCI® COATINGS**

# VpCI®-382

## PRODUCT DESCRIPTION

VpCI-382 is a waterborne urethane topcoat designed to be used over various primers, such as VpCI-374, 375, 395, & 396. VpCI-382 can be produced in almost any color desired, including clear. The major advantage of this top coat is that it offers excellent adhesion to moisture cured primers and other primers. VpCI-382 has high gloss, extremely low VOC, excellent chemical resistance, and excellent exterior durability when used over a primer.

## FEATURES

- Excellent exterior durability when used with a primer
- Water-reducible
- High Solids
- Extremely low VOC
- Excellent adhesion
- Excellent immersion resistance
- Excellent chemical resistance

## MIXING

Mix 2 parts of VpCI-382 White Part A to 1 part of Part B. Mix 1 part of VpCI-382 Clear Part A to 1 part of Part B. Mix until a uniform coating is obtained. After mixing, do not apply the VpCI-382 for at least 15 minutes. If you need to reduce the viscosity, add 5-15 parts of water to the mixed solution and you need to maintain at least 58% solids. The pot life of VpCI-382 White is 3-4 hours at 75°F (25°C). The pot life of VpCI-382 Clear is 2-3 hours at 75°F (25°C). This value may change depending upon the temperature and size of the batch.

## APPLICATION

VpCI-382 may be applied by spray or brush. A film thickness of 1.5-3 dry mils (37.5-75 microns) is recommended, do not exceed 4 dry mils (100 microns). The coating dries to touch in 2.5-3 hours; however it takes approximately one week before the coating is fully cured.

## METALS PROTECTED

- Carbon steel
- Stainless steel
- Galvanized \*\*
- Aluminum \*\*

\*\* A wash primer such as VpCI-373 green applied at 0.5-1.0 dry mils (12.5-25 microns) is recommended before applying the VpCI-395 to these substrates.

## TYPICAL USES

- Metal fabrication
- OEM
- Machinery & equipment
- Tanks

## TYPICAL PROPERTIES

### Part A

Appearance	White
NVC	62-67% by weight
Shelf Life	1 year
Density	12.0-12.5 lb/gal (1.43-1.5 kg/l)
pH	6.8-7.3 (Neat)
Viscosity	1500-3000 cps
VOC (actual)	0.03 lb/gal (2.59 g/l)
VOC (regulatory)	0.07 lb/gal (8.1 g/l)

### PART A

Appearance	Clear
NVC	55-60% by weight
Shelf Life	1 year
Density	8.8-9.3 lb/gal (1.05-1.11 kg/l)
pH	6.8-7.3 (Neat)
Viscosity	2000-5000 cps
VOC (actual)	0.03 lb/gal (2.59 g/l)
VOC (regulatory)	0.02 lb/gal (3 g/l)

### Part B

Appearance	Yellow liquid
NVC	95-100%
Shelf Life	6 months
Density	9.5-9.8 lb/gal (1.14-1.17 kg/l)
VOC (actual)	.019 lb/gal (2.32 g/l)
VOC (regulatory)	.019 lb/gal (2.32 g/l)

### Mixed Properties

Density	White 9.8-10.2 lb/gal (1.17- 1.22 kg/l)
NVC	75-80% by weight
NVC	67-72% by volume
VOC (actual)	.079 lb/gal (9.47 g/l)
VOC (regulatory)	.159 lb/gal (19.05 g/l)
Spread Rate	280-748 ft <sup>2</sup> /gal (7-18.6 m <sup>2</sup> /L) @1.5-4.0 mils DFT (37.5-100 microns)
Mix Ratio	2:1 by weight
Mix Ratio	1.6:1 by volume



## Mixed Properties

Density	8.9-9.4 lb/gal (1.07- 1.13 kg/l)
NVC	77-83% by weight
NVC	76-80% by volume
VOC (actual)	.02 lb/gal (3 g/l)
VOC (regulatory)	.079 lb/gal (9.47 g/l)
Spread Rate	280-748 ft <sup>2</sup> /gal (7-18.6 m <sup>2</sup> /L) @1.5-4.0 mils DFT (37.5-100 microns)
Mix Ratio	1:1 by weight
Mix Ratio	1.2:1 by volume

## PROPERTIES

DFT	1.5-4.0 mils (37.5-100 microns)
WFT	2-5 mils (50-125 microns)
Recoat	30 minutes -8 hours
Pot life	3-4 hours
QUV	1000+ hours 95% gloss retention
Pencil Hardness	2H
Adhesion	5B
Impact Resistance	160 in-lb (direct & reverse)
Immersion resistance in water	1000 hours, no effect with VpCI-395 primer
Application window	40-100°F (4.4-38°C) @ 10-95% relative humidity

## FOR INDUSTRIAL USE ONLY

### KEEP OUT OF REACH OF CHILDREN

### KEEP CONTAINER TIGHTLY CLOSED

### NOT FOR INTERNAL CONSUMPTION

### CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION

## DRY TIME

Dry to touch	2.5-3 hours
Tack Free	4 hours
Full Cure	7 days

## CHEMICAL RESISTANCE

MEK 200+ double rubs  
IPA 200+ double rubs

## ACCELERATED WEATHERING

Primer	Test	DFT	Hours
VpCI-374	Salt Spray ASTM B117	2.5-3.5	1500+
VpCI-374	Humidity ASTM D1748	2.5-3.5	600+
VpCI-375	Salt Spray ASTM B117	2.5-3.5	1500+
VpCI-375	Humidity ASTM D1748	2.5-3.5	600+
VpCI-395	Salt Spray ASTM B117	3.0-4.0	2500+
VpCI-395	Humidity ASTM D1748	3.0-4.0	400+
VpCI-396	Salt Spray ASTM B117	4.0-5.0	1500+

## PACKAGING AND STORAGE

VpCI-382 White part A is available in 5 gallon pail filled with 4 gallons (14.2 liters). VpCI-382 Clear part A is available in 1 gallon pail (3.8 liters). VpCI-382 part B is available in 1 gallon can (3.8 liters). A white kit is 6 gallons total (22.8 liters). You will need 2 gallons of part B. A clear kit is 2 gallons (7.6 liters). You will need 1 gallon (3.8 liters) of part A and 1 gallon (3.8 liters) of part B. Other kit sizes are available upon request.

Do not allow product to freeze.

Storage Temperature 41-70°F (5-21°C)

Shelf Life – 1 year

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