



# VpCI®-381

## PRODUCT DESCRIPTION

VpCI-381 is a waterborne urethane-acrylic hybrid dispersion. It is a one component topcoat designed to be used over various primers, such as VpCI-374, 375, 395 & 396. VpCI-381 can be prepared in almost any color desired, including clear. The major advantage of this top coat is that offers excellent adhesion to moisture cured primers and other primers even after it has fully cured. VpCI-381 has excellent wetting, high gloss, and excellent exterior durability when used over a primer.

## FEATURES

- Excellent exterior durability when used with a primer
- Water-based
- Excellent adhesion
- Excellent UV resistance
- Excellent gloss & clarity

## APPLICATION

VpCI-381 may be applied by spray or brush. A film thickness of 1.5-3 dry mils (37.5-75 microns) is recommended. The coating dries to touch in 20-30 minutes; however it takes approximately one week before the coating is fully cured.

## METALS PROTECTED

Carbon steel  
Stainless steel  
Galvanized \*\*  
Aluminum\*\*  
Wood

\*\* A wash primer such as VpCI-373 green applied at 0.5-1.0 mils (12.5-25 microns) and a primer applied at 2 mils (50 microns) such as VpCI-395 before applying the VpCI-381 to these substrates.

## TYPICAL USES

- General metal
- OEM
- Machinery & equipment

## TYPICAL PROPERTIES - CLEAR

Appearance	Clear
NVC	40-45% by weight
Shelf life	1 year
Density	8.5-9.0
pH	7.5-8.5
DFT	1.5-3.0 mils (37.5-75 microns)
WFT	4.0-8.0 mils (100-200 microns)
Spread Rate	187-374 ft <sup>2</sup> /gal@1.5-3.0 mils (4.6-9.3 M <sup>2</sup> /L)
Viscosity	200-1000 cps
VOC (actual)	0.67(80 g/l)
VOC (regulatory)	1.22 (146.6 g/l)

## TYPICAL PROPERTIES - WHITE

Appearance	White
NVC	45-50% by weight
Shelf life	1 year
Density	9.9-10.3
pH	8.0-9.0
DFT	1.5-3.0 mils (37.5-75 microns)
WFT	3.0-7.5 mils (75-187.5 microns)
Spread Rate	214-427 ft <sup>2</sup> /gal@1.5-3.0 mils (5.3-10.6 M <sup>2</sup> /L)
Viscosity	500-1000 cps
VOC (actual)	0.51 (61.4 g/l)
VOC (regulatory)	0.29 (35.1 g/l)

## DRY TIME

Dry to touch	20-30 minutes
Tack Free	1-2 hours
Full Cure	7 days
Recoat	30 minutes -8 hours
QUV	1000+ hours 95% gloss retention
Pencil Hardness	2H
Adhesion	5B
Impact Resistance	160 in-lb (direct & reverse)

## CHEMICAL RESISTANCE

MEK 200+ double rubs

IPA 50+ double rubs

## ACCELERATED WEATHERING

Primer	Test	DFT	Hours
VpCI-374	Salt Spray ASTM B117	3.5-4.5	168
VpCI-374	Humidity ASTM D1748	3.5-4.5	500
VpCI-375	Salt Spray ASTM B117	3.5-4.5	168
VpCI-375	Humidity ASTM D1748	3.5-4.5	500
VpCI-395	Salt Spray ASTM B117	4.5-5.0	2600+
VpCI-396	Humidity ASTM D1748	3.5-4.5	1500+
VpCI-396	Salt Spray ASTM B117	3.5-4.5	1500+

## STORAGE AND PACKAGING

VpCI-381 is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums, liquid totes, and bulk. Do not allow product to freeze.

## 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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printed on recycled paper  100% post consumer  
Revised: 8/26/13. ©Cortec Corporation 2007-2013. Supersedes: 6/16/09.  
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