



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 ² /gal (7-18.6 m ² /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 ² /gal (7-18.6 m ² /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

LIMITED WARRANTY

All statements, technical information and recommendations contained herein are based on tests Cortec Corporation believes to be reliable, but the accuracy or completeness thereof is not guaranteed.

Cortec Corporation warrants Cortec® products will be free from defects when shipped to customer. Cortec Corporation's obligation under this warranty shall be limited to replacement of product that proves to be defective. To obtain replacement product under this warranty, the customer must notify Cortec Corporation of the claimed defect within six months after shipment of product to customer. All freight charges for replacement products shall be paid by customer.

Cortec Corporation shall have no liability for any injury, loss or damage arising out of the use of or the inability to use the products.

BEFORE USING, USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR ITS INTENDED USE, AND USER ASSUMES ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH. No representation or recommendation not contained herein shall have any force or effect unless in a written document signed by an officer of Cortec Corporation.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. IN NO CASE SHALL CORTEC CORPORATION BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.



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>

printed on recycled paper  100% post consumer

Revised 12/23/09. Cortec Corporation 2000-2009. All rights reserved. Supersedes: 3/11/09.
VpCI® is a trademark of Cortec Corporation. © 2009, Cortec Corporation. All Rights Reserved. Copying of these materials in any form without the written authorization of Cortec Corporation is strictly prohibited.

Distributed by: