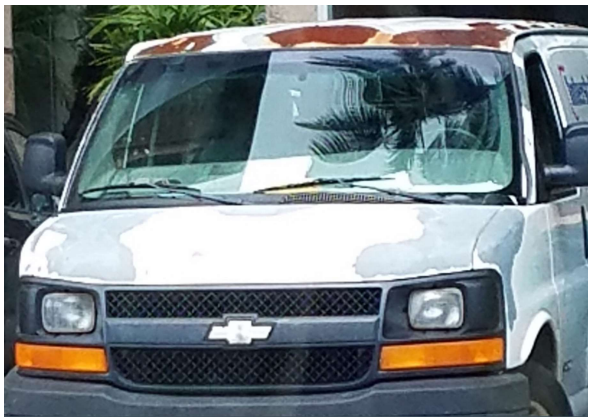
Refurbish your Van and Extend service life
Peeling Paint and Rust on Service Vans – Corrosion Cops has DIY



2007 Chevy Van - Purchased (used) February 2009
March 2009 Aloha Signs did our Company lettering

2014 Paint peeling off

2014 applied CarWell CP90 annually to control rusting

Message using CP90

Corrosion Control - Time to refurbish Company Van
May 20, 2019

2017 Looking pretty sad

2016 Paint keeps peeling off

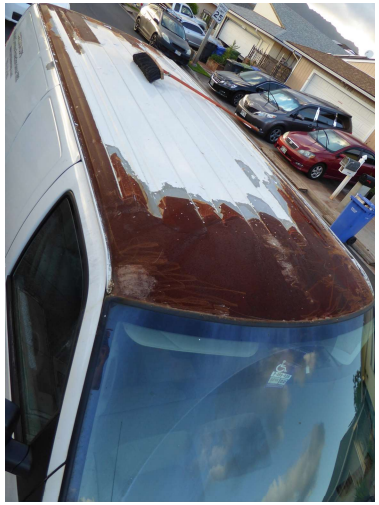
Procedure to Refurbish Rusted Van

1. Degrease if oils are present on Van surfaces
2. Rinse with potable water
3. Rinse surface with Salt Away if chlorides present
4. Allow surface to dry
5. Scrape loose paint from surface
6. Surface prep rusted areas with mechanical abrasion
7. Sand excessive oxidation/rust to get to tight rust
8. Apply Cortec Corrverter* water based rust converter to 5 mil dry coating thickness by applying 3-5 coats allowing each coat to dry to touch before applying next coat.
9. Apply Cortec VpCI 396 Moisture Cure Urethane, minimum 3 coats, allowing ample dry to touch time between coats.
10. Allow 24-48 cure time.
11. Apply finish coat to match vehicle color.

*Avoid acid based convert a rust product in Hawaii!

Supplies

- Disposable gloves
- Rags
- Sand paper
- Paint scrapper
- Paint Brushes
- Blower/Shop Vac
- Degreaser
- Salt Away
- Cortec Corrverter – Gallon
- Cortec VpCI 396 Moisture Cure Urethane – Gallon
- PPE for VpCI 396 application
- Xylene
- Empty Quart Paint Cans (4)
- Finish Color



Step 5, Step 6 and Step 7 – Prepping surface to tight rust

5-20-2019

Mix thoroughly bottom to top

Step 8 – Applying 1st Coat of Cortec Corrverter – **Water Based** Rust Converter

5-22-2019

1st Coat Cortec Corrverter
Dried to touch

Step 8 continued
Applying 2nd Coat of Cortec Corrverter – **Water Based** Rust Converter

5-24-2019

2nd Coat Cortec Corrverter
Dried to touch

Step 8 continued
Applying 3rd Coat - Cortec Corrverter – **Water Based** Rust Converter

5-30-2019

3rd Coat Cortec Corrverter – Dried to touch 5-31-2019

*Go to next slide for Tip on storing VpCI 396 Moisture Cure Urethane

Step 9 – Applying 1st coat - Cortec VpCI-396 Moisture Cure Urethane*

6-6-2019

Cortec VpCI – 396
Moisture Cure Urethane
Gallon

Cortec VpCI-396 Storage Tip:
Pour VpCI-396 Gallon into 4 Quart Empty Cans
Fill 90% full and top with Xylene to bottom of rim of paint can.
Hammer lid on, be sure it doesn't leak and store can upside down. Store in cool area.
When ready to use – shake can, open and stir.

After 1st Coat – top VpCI-396 Quart Can off with ¼" to ½" of Xylene. Do not stir or shake.
Install lid and do not leave can open. The reason for doing this is to prevent atmosphere from curing the VpCI-396 while waiting for applied coating to dry. The components of urethane paints react with moisture and will go bad. One part urethanes are moisture curing. I use these, in small quantity as well, buy Quart cans to minimize the amount of times they are opened before they are used. If curing starts (I call that plasticing)as VpCI-396 goes into a bondo curing state when allowed to set up, VpCI-396 can be brought back from this by adding xylene to the can and stirring to bring it back to liquid state. If it goes too far in curing it becomes non usable as it may chunk up and not flow and coat properly.

1st Coat VpCI-396 – Dried to touch

Step 9 continued
Applying 2nd coat - Cortec VpCI-396
Moisture Cure Urethane

6-10-2019

Before 5-20-2019

Done
DIY Project
Rich took his time
You can complete in couple days
or couple weeks!

After 6-10-2019
Skipped Finish
Paint

Before 5-20-2019

Current 4-9-2020

Another successful DIY by BOCA Hawaii on company Box truck

Before

After January 2017
Skipped Step 9
Did finish paint to match

November 2018

December 2019

Difference – shorter time before onset of rerusting vs LONGER TIME PERFORMANCE
Applying Cortec VpCI-396

Cortec Products

CORTEC CORPORATION
Environmentally Safe VpCI®/MCI® Technologies

CorrVerter® Rust Converter Primer

DESCRIPTION

CorrVerter® is a fast drying, water-based one-coat system (primer) that converts rusted surfaces to a hydrophobic passive layer and prevents further rusting thru the unique formulation of chelating agents and PVDC resins.

PACKAGING & STORAGE

CorrVerter® is available in 1 gallon (3.8 liter) and 5 gallon (19 liter) pails. Keep product from freezing.

To ensure best product performance, store in original packaging, indoors, and out of direct sunlight at 40-100 °F (4-38 °C).

Shelf life: 1 Year

CHARACTERISTICS/TECHNICAL DATA

Volume Solids	34.50% +/- 2%
Gloss (ASTM D532)	15-25
VOCs (ASTM D3960)	0.1 lbs/gal (12 g/L)
Viscosity	7,000-20,000 Centipoise
Pencil Hardness (ASTM D3363)	F
Spreading Rate	553 sq.ft/gal @ 1.0 mils DFT (13.57 sq.m/L @25 µm)
Weight per Gallon	11.59 lbs/gal (1.39 kg/L)
Flash Point	>200 °F (93 °C)
Recommended DFT	3.0-5.0 mils (75-125 µm)
Recommended WFT	8.7-14.5 mils (217.5-362.5 µm)
Dry to Touch	2-3 hrs
Dry to Handle	4-6 hrs
Recoat Time	Dry to touch - 72 hrs
Force Dry	15-20 min @ 150 °F (65 °C)
Full Cure	3-7 days
Salt Spray (ASTM B117)	500 hrs
Humidity (ASTM D1748)	250 hrs
Adhesion (ASTM D3359)	5B
Flexibility (ASTM D522)	½" mandrel (1.27 cm)

*All tests performed after a 7 day cure at ambient temperature

CorrVerter® Rust Converter Primer

APPLICATION

Surface Preparation

Substrate should be free of loose rust, grease, oil, dirt, fingerprints, drawing compounds, rust inhibitors (except Cortec® approved), or any other surface contamination that could affect adhesion. Consult Cortec® Technical Service and/or test system adhesion prior to full scale application. It is recommended to remove any loose rust prior to application.

When solvent based topcoats are applied over CorrVerter®, compatibility must be checked. All Cortec® High Performance Coatings can be topcoated over CorrVerter®.

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. Can be diluted up to 15% with water. CorrVerter® can be applied by spray, roll, brush, or dip.

Typical Equipment Setups

HVLP / Conventional Spray
- Tip .02"-.11" (0.5-2.8 mm)*dependent upon pressures and viscosity
- Air Pressure 45-55 psi
- Fluid Pressure 10 psi
- Fluid hose should be ¼" (0.95 cm) I.D. with a maximum length of 50 feet (15.2 m). ¼" (0.64 cm) I.D. fluid hose can be used, but pressures may need to be adjusted. Pot should always have dual regulation and be kept at same elevation as spray gun.

Air Assisted Airless / Airless
- Tip .015"-.035" (0.38-0.89 mm)*dependent upon pressures and viscosity
- Pressure 1800-2500 psi
- Hose should be ¼" (0.95 cm) I.D. minimum, but a ¾" (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.

Cleanup

Clean tools/equipment immediately after use with water when paint is still wet. When dry, use butyl cellusolve or MEK. Follow mfg's safety recommendations when using any solvent.

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Revised: 09/05/19 Supersedes: 11/06/18

CORTEC CORPORATION
Environmentally Safe VpCI®/MCI® Technologies

VpCI®-396 Moisture Cure Urethane Primer/Topcoat

DESCRIPTION

VpCI®-396 is a fast drying, solvent-based moisture cure urethane one coat system (primer & topcoat) that can be applied DTM (Direct to Metal) and provides protection in harsh, outdoor, unsheltered applications. The complex mixture of non-toxic, organic inhibitors offers protection that competes with most paints and zinc-rich primers. Provides multi-metal protection. Can be matched to most custom colors.

PACKAGING & STORAGE

VpCI®-396 is available in 5 gallon (19 liter) pails. Partially used containers must be purged with nitrogen.

Product shelf life is 1 year.

CHARACTERISTICS/TECHNICAL DATA

Volume Solids	56.20%
Gloss (ASTM D532)	30-50
VOCs (ASTM D3960)	3.1 lbs/gal (371 g/l)
Viscosity	55-65 sec• Zahn#3
Pencil Hardness (ASTM D3363)	2H
Spreading Rate	901 sq.ft/gal @ 1.0 mils DFT (22.1 sq.m/l @ 25 µm)
Weight per Gallon	9.39 lbs/gal (1.13 kg/l)
Flash Point	77°F (25°C)
Recommended DFT	2.0-3.0 mils (50-75 µm)
Recommended WFT	3.5-5.3 mils (88-130 µm)
Dry to Touch	2-3 hrs
Dry to Handle	4-6 hrs
Recoat Time	Dry to touch - 72 hrs, sand thereafter
Force Dry	15-20 min @ 150°F (65°C)
Full Cure	3-7 days
Salt Spray (ASTM B117)	750 hrs
Humidity (ASTM D1748)	1000 hrs
Adhesion (ASTM D3359)	5B
Flexibility (ASTM D522)	1/2" mandrel (1.27cm)

*All tests performed after a 7 day cure at ambient temperature

VpCI®-396 Moisture Cure Urethane Primer/Topcoat

APPLICATION

Surface Preparation

Substrate should be free of grease, oil, dirt, fingerprints, drawing compounds, rust inhibitors, or any other surface contamination that could affect adhesion. For production line applications, use VpCI-440 or similar phosphatizing pre-treatment. For structural steel applications, Cortec® recommends a minimum of a NACE #3/ SSPC-SP6 commercial blast clean. Consult Cortec® Technical Service and/or test system adhesion prior to full scale application.

A wash primer such as VpCI-373 green applied at 0.5-1.0 mils (12.5-25 microns) is recommended before applying the VpCI®-396 to aluminum, galvanized or plated substrates. When solvent based topcoats are applied over VpCI-396, compatibility must be checked. Cortec® recommended topcoats include VpCI®-280, 380, 381, 386, 387, 390, 392, 382, and 384.

Note: Make sure dew point is more than 5°F (2°C) less than air temperature for application. Humidity must be min. 20%, max. 80%. Power agitate to a uniform consistency using a "squirrel cage" type mixer, hand-held drill mixer, or other equivalent method. VpCI®-396 can be applied by spray, roll, brush, or dip

Typical Equipment Setups

HVLP / Conventional Spray
- Tip .009"-.021" *dependent upon pressures and viscosity
- Air Pressure 45-55 psi
- Fluid Pressure 10 psi
- 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.

Air Assisted Airless / Airless
- Tip .015"-.035" *dependent upon pressures and viscosity
- Pressure 1800-2500 psi
- Hose should be 3/8" (0.95 cm) I.D. minimum, but a ¼"
- (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.

Cleanup

Clean tools/equipment immediately after use with Butyl Acetate when paint is still wet. When dry, use Butyl Cellusolve or MEK. Follow mfg's safety recommendations when using any solvent.

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Cortec Corrverter
Gallon

Cortec VpCI – 396
Moisture Cure Urethane
Gallon

More information www.corrosioncops.com

Stocked locally contact us (808) 676-1963 or corrosioncops808@gmail.com for pricing and availability