# **VpCI®-396**



# **PRODUCT DESCRIPTION**

VpCl-396 is a high solids aromatic moisture cure urethane. VpCl-396 is a direct to metal primer for multimetal protection. VpCl-396 should be top coated with an aliphatic urethane top coat for best results. In addition to the outstanding barrier protection, VpCl-396 also contains contact corrosion inhibitors for additional protection. VpCl-396 is suitable for immersed structures when applied over VpCl® CorrVerter® for marginally prepared surfaces; such as ballast tanks, storage tanks, or holding tanks containing hydrocarbons to high salinity solutions.

VpCl-396 forms a very hard, but flexible coating that cures in the presence of moisture in the air. For best results the curing conditions required are a relative humidity between 20% and 80% with temperatures above 32°F (0°C) and below 120°F (50°C).

#### **FEATURES**

- Single component package
- Can be coated at a relative humidity up to 80%
- Can be applied at low temperatures
- Excellent adhesion
- High solids

## **METALS PROTECTED**

- Aluminum\*\*
- Cast iron
- Galvanized steel\*\*
- Steel
- \*\* A wash primer such as VpCl®-373 green applied at 0.5-1.0 mils (12.5-25 microns) is recommended before applying the VpCl-396 to these substrates.

### TYPICAL APPLICATIONS

- Bridges
- OEM
- Structural steel
- Storage tanks
- Ballast tanks or ships

# **TYPICAL PROPERTIES**

Appearance Viscous aluminum liquid
Dry to recoat time Minimum 4 hr. @ 77°F (25°C),

55% relative humidity

Maximum time to Recoat 2 weeks after initial application (solvent wipe may be required)

Dry to touch time 1 hr. @ 77°F (25°C), 55% rela-

tive humidity

Fully Cured 7 days @ 77°F (25°C), 55% RH

Film type Hard

Flash point 78°F (25°C) Non-volatile content 63-72% by weight (60-62% by volume)

Shelf life 1 year

Theoretical spread rate 328-481 ft²/gal @ 2-3 mil DFT

(7.9-11.6 m<sup>2</sup>/l @ 50-75 microns

DFT)

 Viscosity
 500-1100 cps at 6 rpm

 VOC (regulatory)
 3.1-3.2 lb/gal (372-384 g/l)

 VOC (actual)
 3.1-3.2 lb/gal (372-384 g/l)

 Density
 9.2-9.6 lb/gal (1.10-1.15 kg/l)

Coefficient of Friction 0.20 Adhesion 5B Film Hardness 4H-7H

Temperature Resistance -150°F to 300°F (Fully Cured) -150°C to 150°C)



#### SURFACE PREPARATION

NACE #2, ARS High A-3, SSPC SP6 or 10. Surface must be dry prior to application of product (no moisture).

#### **APPLICATION**

**Product Preparation:** 

Stir VpCI-396 prior to usage. (Do not use a high shear blade).

Methods for Monitoring Application: Wet film thickness gauge.

## **Product Application:**

Normal wet film thickness of 3-5 mils (75-125 microns) yields 2-3 mils (50-75 microns) dry film thickness. It is recommended under high humidity conditions (60-80%) that the maximum wet film thickness should be reduced to approximately 2-2.5 mils (50-62 microns), and application of two coats may be necessary.

Do not exceed 3 dry mils (75 microns).

Recommended use of Airless Spray:

ManufacturerGun ModelTip/Aircap CombinationGraco205-591BulldogBinks500Mercury 5CDeVibissJGN-501QFA-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  $^{1}\!4"$  (0.6 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" (0.03 cm - 0.04 cm) tip at 1200-1700 psi (83-117 bar).

NOTE: Nylon or Teflon type packings are available from pump manufacturer and are highly recommended.

NOTE: Similar equipment may be suitable.

# Product Cleanup:

Low flash point solvent (xylene, toluene, aromatic 100)

# TEST DATA [ AT 2 MILS (50 MICRONS)] DFT\*

Test Method	SAE 1010 Carbon Steel
Salt Spray (ASTM B 117)	900-1000 hours
Humidity (ASTM D 1748)	1000+ hours

<sup>\*</sup>Dry Film Thickness

## **PACKAGING AND STORAGE**

VpCl-396 is available in 5 gallon (19 liter) metal pails. One gallon pails available upon request.

Important: A partially used container must be purged with nitrogen to prevent a reaction in the can if it is not used within one day!

## **LIMITATIONS**

Apply VpCI-396 only at relative humidity of between 20% and 80%. Air temperature should be between 32°F and 100°F (0°C and 38°C).

#### 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 CONSFOLIENTIAL 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: 8/28/13. ©Cortec Corporation 2002-2013. Supersedes: 11/8/12
CorrVerter\* is a trademarks of Cortec Corporation. ©2013, Cortec Corporation. All Rights Reserved. Copying of these materials in any form without the written authorization of Cortec Corporation is strictly prohibited. ISO accreditation applies to Cortec's processes only.

Distributed by: