



MICRO-CORROSION INHIBITING COATINGS POWERED BY NANO VPCI®

VpCI®-386 HT Aluminum



- UV resistant
- Optimal outdoor performance

MIXING INSTRUCTIONS

This coating is supplied in a single component. Power agitate at low speed to a uniform consistency using a “squirrel cage” type mixer, hand-held drill mixer, or other equivalent method.

APPLICATION

VpCI®-386 HT Aluminum can be used as a topcoat/primer. When solvent-based topcoats are applied over VpCI®-386 HT Aluminum, compatibility must be checked. VpCI®-386 HT Aluminum can also be used as a topcoat with Cortec® VpCI®-374 or VpCI®-395 as a primer.

Note: Make sure dew point is more than 5°F (2°C) less than air temperature for application and the temperature is at least 55°F (13°C).

VpCI®-386 HT Aluminum can be applied via spray, roller, or brush.

PRODUCT DESCRIPTION

VpCI®-386 HT Aluminum is a unique, high heat resistant water-based primer/topcoat that successfully provides protection in harsh outdoor unsheltered applications. The complex mixture of non-toxic, organic inhibitors, and an aluminum pigment offers protection that can compete with most paints and zinc-rich primers.

VpCI®-386 HT Aluminum is superior to many coatings with only inorganic pigments. The resistance has been improved by using a highly corrosion resistant aluminum platelet type pigment with organic corrosion inhibitors. The special combination of additives provides a composite polymer barrier that significantly retards the reaction of metal ionization and repels water. A protective film is adsorbed onto metal surfaces. It protects against corrosive electrolytes and aggressive environments, thus preventing corrosion.

VpCI®-386 HT Aluminum provides a fast-drying thixotropic coating that is resistant to sagging or running. This dry-to-touch film offers extended protection for sheltered, unsheltered, outdoor, or indoor conditions. Thermally stable when dried from -150°F to 700°F (-78° to 371°C). The coating is ultraviolet resistant. It gives optimal outdoor performance without cracking or chipping upon prolonged exposure to sunlight.

METALS PROTECTED

- Carbon steel
- Cast iron
- Aluminum**
- Stainless steel
- Galvanized steel**
- Copper

** 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-386 HT Aluminum to these substrates.

TEST DATA

	CS 1010	Aluminum
Salt Spray (ASTM B117)	500+ hr.*	1000+ hr.
Humidity (ASTM D1748)	1000+ hr.	1000+ hr.

*1.5 to 2-mils (37.5 to 50 microns)

FEATURES

- Heat resistant up to 700°F (371°C)
- Fast-drying

Passes:

ASTM D-2485-91: Standard Test Methods for evaluating coatings for High Temperature Service (Method A) (After heating)

Conventional Spray

Manufacturer	Gun Model	Tip/Aircap Combination
DeVilbiss	MBC or JGA	704E
Binks	#18 or #62	66PE

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.

Airless

Manufacturer	Gun Model	Tip/Aircap Combination
Graco	205-591	Bulldog
Binks	Model 500	Mercury 5C
DeVilbiss	JGN-501	QFA-519

Hose should be 3/8" (0.95 cm) I.D. minimum, but a 1/4" (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. Best results will be obtained using a 0.013"-0.017" (0.3-0.4 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.

PACKAGING AND STORAGE

VpCI®-386 HT Aluminum is available in 5 gallon (19 liter), 55 gallon (208 liter), liquid totes, and bulk. Keep product from freezing. Avoid temperatures higher than 75°F (24°C) while in storage.

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

TYPICAL PROPERTIES

Appearance	Medium Grey Aluminum
pH	8.5-9.5 (Neat)
Density	8.3-8.8 lb/gal (0.99-1.05 kg/l)
Non-volatile Content	35-40%
Fully Cured	7 days at 77°F (25°C) 55% RH
Dry Film Thickness (per coat)	1.0-2.5 mils (25-62.5 μm)
Theoretical Spread Rate	224-561 ft ² /gal (1-2.5mils) 5.2-14m ² /l (25-67.5 μm)
Dry to Touch Time	30 minutes @ 77°F (25°C)
VOC	79.8 g/l
Viscosity	700-3,000 cps (6 rpm/#3)
Shelf life	12 months
Temperature Resistance (Fully Cured)	-150°F to 700°F (-78°C to 371°C)

STANDARD TEST METHODS

ASTM B-117	Salt Spray
ASTM D-1748	Humidity
ASTM D-3359	Adhesion
ASTM D-522	Flexibility
ASTM D-532	Gloss
ASTM D-3960	VOC
ASTM D-3363	Pencil Hardness
ASTM D-2485-91	High Temperature Service (Method A and B)
NACE RP0487-2000	Selection of Rust Preventives
NACE	Minimum Surface Preparation Guideline
SSPC	Minimum Surface Preparation Guideline

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.



CORTEC
CORPORATION

Environmentally Safe VpCI®/MCI® Technologies

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: 10/18/16. Supersedes: 08/07/13. ©Cortec Corporation 2002-2016 of Cortec Corporation. All Rights Reserved. Copying of these materials in any form without the written authorization of Cortec Corporation is strictly prohibited. 2016, ©Cortec Corp. ISO accreditation applies to Cortec's processes only.

Distributed by: