

Editorial Contact:
Cortec® Advertising Agency:

Shannon Garrow
(651) 429-1100 Ext. 128

sgarrow@cortecvci.com

Company Contact:
Cortec® Corporation

Markus Bieber
(651) 429-1100 Ext. 152

mbieber@cortecvci.com

Technical Contact:
Cortec® Corporation

Rick Shannon
(651) 429-1100 Ext. 146

rshannon@cortecvci.com



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PRESS RELEASE



Cortec's VpCI®-371 Coating: Innovative Corrosion Protection That Reduces Manufacturing Costs!

Cortec® VpCIs offer a range of innovative options for reducing manufacturing costs and corrosion. In the case of VpCI®-371, Cortec's protection rivals the corrosion resistance of stainless steel while significantly reducing material costs.

VpCI®-371 is a high temperature aluminum solvent-borne silicone coating that provides excellent corrosion resistance on metal substrates. It will dry tack free to 5B hardness in about 20 minutes at room temperature and will achieve 9H hardness after heating. This is an ideal coating for applications that will reach high temperatures because the coating is heat stable to 1200°F with prolonged heat resistance from 400-1200°F.



VpCI®-371 turned out to be just the high temperature coating a manufacturer of oil coolers was looking for as it tried to reduce the high cost of using stainless steel while maintaining corrosion resistance. The company manufactures hundreds of oil coolers for a major producer of heavy equipment. When carbon steel oil coolers had been used inside the heavy equipment, corrosion was found at the six-month

preventative maintenance check. Because of this, the manufacturer had to use more expensive stainless steel to make oil coolers that would resist corrosion. However, the manufacturer wondered if a high-temperature protective coating from Cortec® would allow them to make carbon steel oil coolers that would resist corrosion as well.

To examine the prospect, oil coolers manufactured out of carbon steel were internally coated with VpCI®-371 and sent to the field for testing. At the six-month preventative maintenance check, no corrosion was found on the oil coolers. The heavy equipment customer agreed to specify carbon steel and VpCI®-371 as the materials for making future oil coolers to install in their heavy equipment. This resulted in a significant cost reduction to the oil cooler manufacturer, who was now able to use a cost effective material to create oil coolers that would not corrode.

VpCI®-371

TYPICAL PROPERTIES

Appearance	Aluminum liquid
Dry film thickness	20 mils (508 µm) (1.0 mil (25.4 µm) per coat)
Panel hardness	5B - Rockwell C
MET Resistance	RH - Corval @ 200°F (260°C)
Density	200 lbs/cu ft (3200 kg/m³) - After heating
Solids Wt.	8.4-8.8 lb/gal (32.0-33.5 kg)
Solids Vol%	52-56%
Spindle Volume	44-57%
Viscosity	250 to 1000 cps at 6 RPM
VOC (Regulation)	3.2-3.8 lb/gal (120-140 g/l)
VOC (Actual)	295.4-421.4 g/l (29.6-55.5 g/l)

TESTS

Passes:
ASTM D-2485-91: Standard Test Methods for evaluating coatings for High Temperature Service (Method A and B)

PACKAGING

VpCI-371 is available in 5 gallon (19 liter) metal pails and 55 gallon (208 liter) metal drums. Keep this coating from freezing.

FEATURES

- Heat stable to 1200°F (648.9°C)
- 600 hour salt spray resistance
- 9H pencil hardness
- 200 double rub HEC resistance with no effect
- Excellent aluminum appearance
- No hand sifting of aluminum
- Heat resistance from 400-1200°F (204-656°C) for a prolonged period
- Low VOC

TYPICAL APPLICATIONS

- Automotive industry
- Power generation
- Aviation
- Off shore drilling, etc.

VpCI-371 should be thoroughly mixed prior to use. Apply by spray or dip.

With the successful replacement of VpCI®-371-coated carbon steel for stainless steel, Cortec® looks forward to the discovery of other applications where VpCI® can help manufacturers reduce costs while still providing end users with excellent corrosion protection.

Cortec's VpCI®-371 conforms to ASTM D-2485-91: Standard Test Methods for evaluating coatings for High Temperature Service (Method A and B)

To view more information about VpCI®-371, please visit our product page at:

<http://www.cortecvci.com/Publications/PDS/VpCI-371.pdf>

For more information about Cortec's innovative coatings solutions, please visit here:

<http://cortecoatings.com/>

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Cortec® Corporation is the global leader in innovative, environmentally responsible VpCI® and MCI® corrosion control technologies for Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil & Gas, and other industries. Our relentless dedication to sustainability, quality, service, and support is unmatched in the industry. Headquartered in St. Paul, Minnesota, Cortec® manufactures over 400 products distributed worldwide. ISO 9001, ISO 14001:2004, & ISO 17025 Certified.

Cortec Website: <http://www.cortecvci.com> Phone: 1-800-426-7832 FAX: (651) 429-1122