



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

Evaluating VpCI-126 Film for Customer

To: Matt Richey
For: Customer
From: Cortec Corporation Laboratories
4119 White Bear Parkway
St. Paul, MN 55110
cc: Boris Miksic
Cliff Cracauer

Project #: 13-202-1125.bis

Test conducted by: *Eric Uutala*

Eric Uutala
Technical Service Manager

Approved by: *M. Kharshan*
Margarita Kharshan
Vice President of R&D

Date: November 12, 2013



Background: Customer sent machined parts to Cortec for evaluation. They would like Cortec to evaluate the effectiveness of VpCI-126 film on these parts.

Sample Received: Two cylindrical machined steel parts

Method: ASTM D-1735 Water Fog Cabinet

Materials: Two cylindrical machined steel parts
VpCI-126 Blue Film (Lot #310220)
Non-VCI Polyethylene (PE) film
Laboratory grade methanol

Procedure: The following procedure was used:

- 1) Prior to testing, two machined parts were visually inspected and then cleaned with methanol.
- 2) After cleaning, one part was packed in VpCI-126 blue film zip top bag, the other in a non-VCI PE film zip top bag.
- 3) After packing, both parts were allowed to condition overnight.
- 4) Both parts were then placed in ASTM D-1735 Water Fog cabinet.
- 5) Both parts were visually inspected periodically.
- 6) After 504 hours, both parts were removed from ASTM D-1735 Water Fog cabinet.
- 7) Both parts were unwrapped, visually inspected, and photographed.

Results: The following results were found:

Packaging Used	Time to Corrosion (Hours)
Non-VCI Polyethylene	24
VpCI-126	504

Photos: Photos below.



Figure 1: Non-VCI PE packed part, after 504 hours in ASTM D-1735 testing.



Figure 2: VpCI-126 packed part, after 504 hours in ASTM D-1735 testing.

Interpretations: After 504 hours in ASTM D-1735 water fog testing, VpCI-126 provided excellent corrosion protection, when compared to a non-VCI polyethylene film.