



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

***Comparing Tectyl 506 to Similar Cortec  
Rust Preventives for Customer***

**To:** Steve Pearl

**From:** Cortec Corporation Laboratories  
4119 White Bear Parkway  
St. Paul, MN 55110

**cc:** Boris Miksic  
Cliff Cracauer  
Mike Gabor

**Project #:** 13-136-1825.bis

**Test conducted by:** *Eric Uutala*

Eric Uutala  
Technical Service Engineer

**Approved by:** *M. Kharshan*  
Margarita Kharshan  
Laboratory Director

**Date:** October 31, 2013



**Background:** Customer currently uses Tectyl 506 as part of a protection system on their equipment being shipped overseas. They would like this product compared to similar Cortec products.

**Sample Received:** Tectyl 506 – Quart sample  
Six machined metal plates

**Method:** ASTM D-1735 Water Fog Cabinet  
ASTM B-117 Salt Fog

**Materials:** Tectyl 506  
Six machined metal plates  
VpCI-368D  
VpCI-389D  
Laboratory grade methanol

**Procedure:** The following procedure was used:

- 1) Prior to testing, all plates were cleaned with methanol.
- 2) After cleaning, plates were prepared as follows:
  - a. Two plates were brushed with Tectyl 506
  - b. Two plates were brushed with VpCI-368D
  - c. Two plates were brushed with VpCI-389D
- 3) After coating, all plates were allowed to air dry overnight.
- 4) Next, one set of plates was put in ASTM D-1735 water fog cabinet. The second set of plates was put in ASTM B-117 salt fog cabinet.
- 5) All plates were visually inspected periodically.
- 6) After 600 hours, all plates were removed from ASTM B-117 salt fog cabinet.
  - a. All plates were visually inspected and photographed.
- 7) After 1500 hours, all plates were removed from ASTM D-1735 water fog cabinet.
  - a. All plates were visually inspected and photographed.

**Results:** The following results were found:

**ASTM B-117 Salt Fog**

<b>Coating Used</b>	<b>Time to Corrosion (Hours)</b>
Tectyl 506	120
VpCI-368D	DNF*
VpCI-389D	528

DNF – Did not fail during 600 hours of ASTM B-117 testing.

### ASTM D-1735 Water Fog

Coating Used	Time to Corrosion (Hours)
Tectyl 506	DNF*
VpCI-368D	DNF*
VpCI-389D	DNF*

DNF – Did not fail during 1500 hours of ASTM D-1735 testing.

#### Photos:



Figure 1: Steel plates after 600 hours in ASTM B-117 salt fog testing. From left to right: Tectyl 506, VpCI-368D, VpCI-389D.

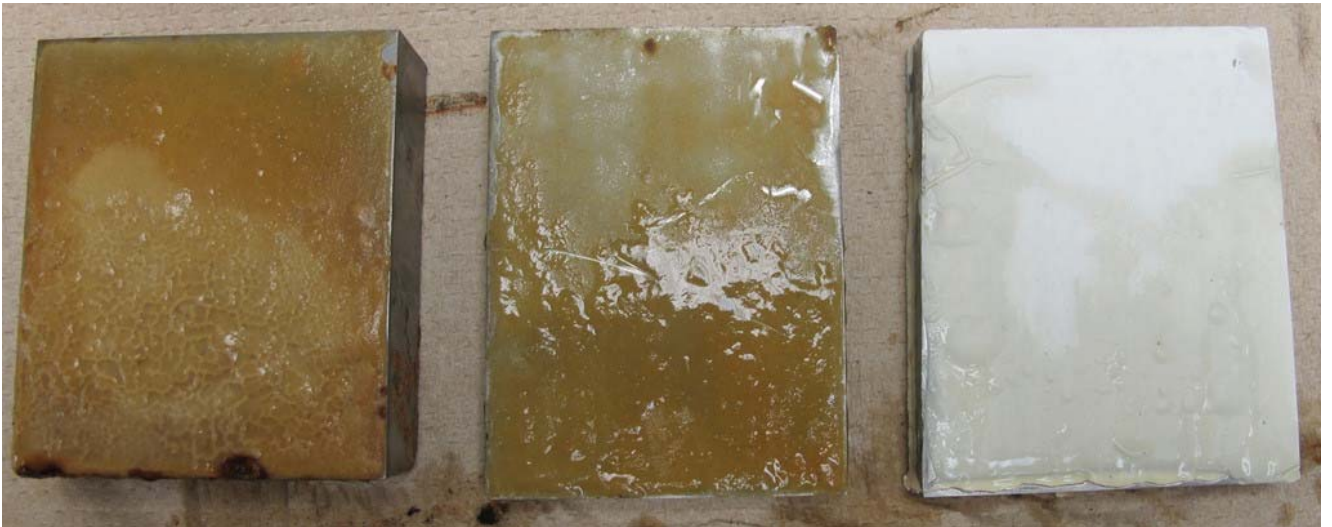


Figure 2: Steel plates after 1500 hours in ASTM D-1735 water fog testing. From left to right: Tectyl 506, VpCI-368D, VpCI-389D.

**Interpretations:** Although all three products provided equal corrosion protection in high humidity testing, the Tectyl coating did start to blister severely. Salt fog testing caused severe failure from the Tectyl coating within 120 hours. The two Cortec coatings effectively protected for the 600 hours test duration.