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Evaluation of Zormot-VCI UV Shrink Film

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Project #: 13-090-1125.bis

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Background: It was requested that Zormot-VCI UV Shrink film be tested for corrosion protection and comparison of UV properties to VpCI-126 Shrink film and VpCI-126 Blue HP UV Shrink film.

Sample Received:

- 1) Dark green Zormot film, good condition, received 04/29/13

Method:

- 1) VIA Test (CC-027)
 - 2) Razor Blade Test (CC-004), modified*
 - 3) FTIR Test (CC-006)
- *Cortec Laboratory is not accredited for the test marked

Materials:

- 1. VIA Test Kit
- 2. Laboratory Grade Methanol
- 3. Carbon Steel Panels
- 4. Copper Panels
- 5. Control Film, Plain Polyethylene Film
- 6. Deionized Water
- 7. Paragon 1000 FTIR

Procedure: The tests were performed according to their standard procedures. For the razor blade test for the Zormot film, only 1 panel was tested for each metal because of limited amount of film submitted for testing.

Results:

Razor Blade Test – Carbon Steel

Sample	Panel 1	Panel 2	Panel 3
Zormot	Pass	-	-
Control	Fail	-	-

Razor Blade Test – Copper

Sample	Panel 1	Panel 2	Panel 3
Zormot	Fail	-	-
Control	Fail	-	-

VIA Test

Sample	Plug # 1	Plug # 2	Plug # 3	Pass / Fail
Zormot	Grade 1	Grade 1	Grade 2	Fail
Control	Grade 0	N/A	N/A	Fail

Note: Grades 0 and 1 are considered failing. See below for grading scale example.

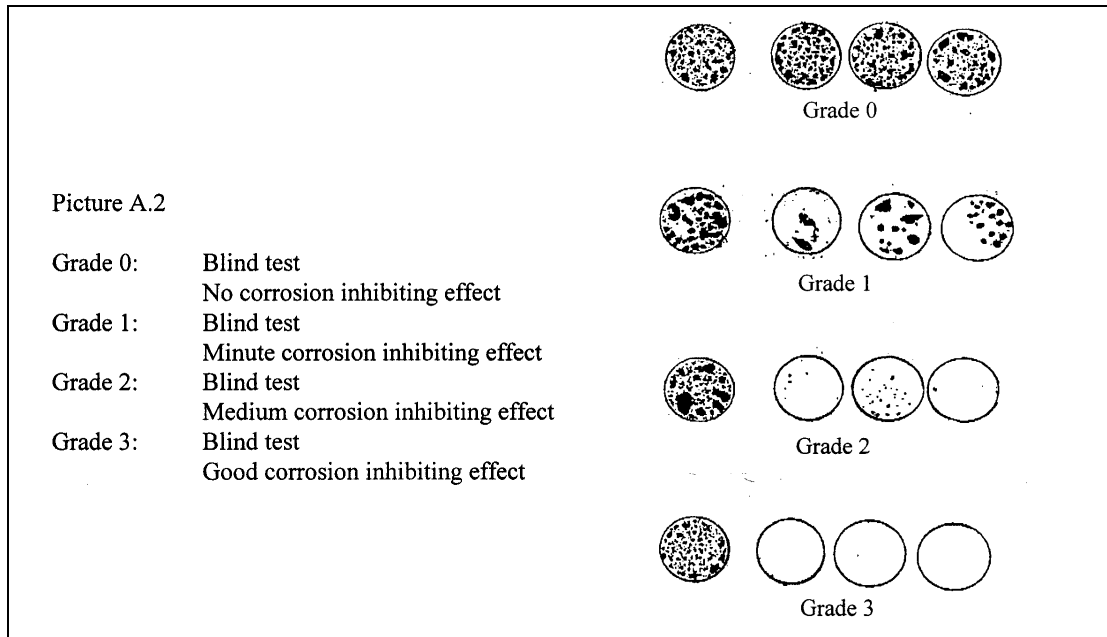
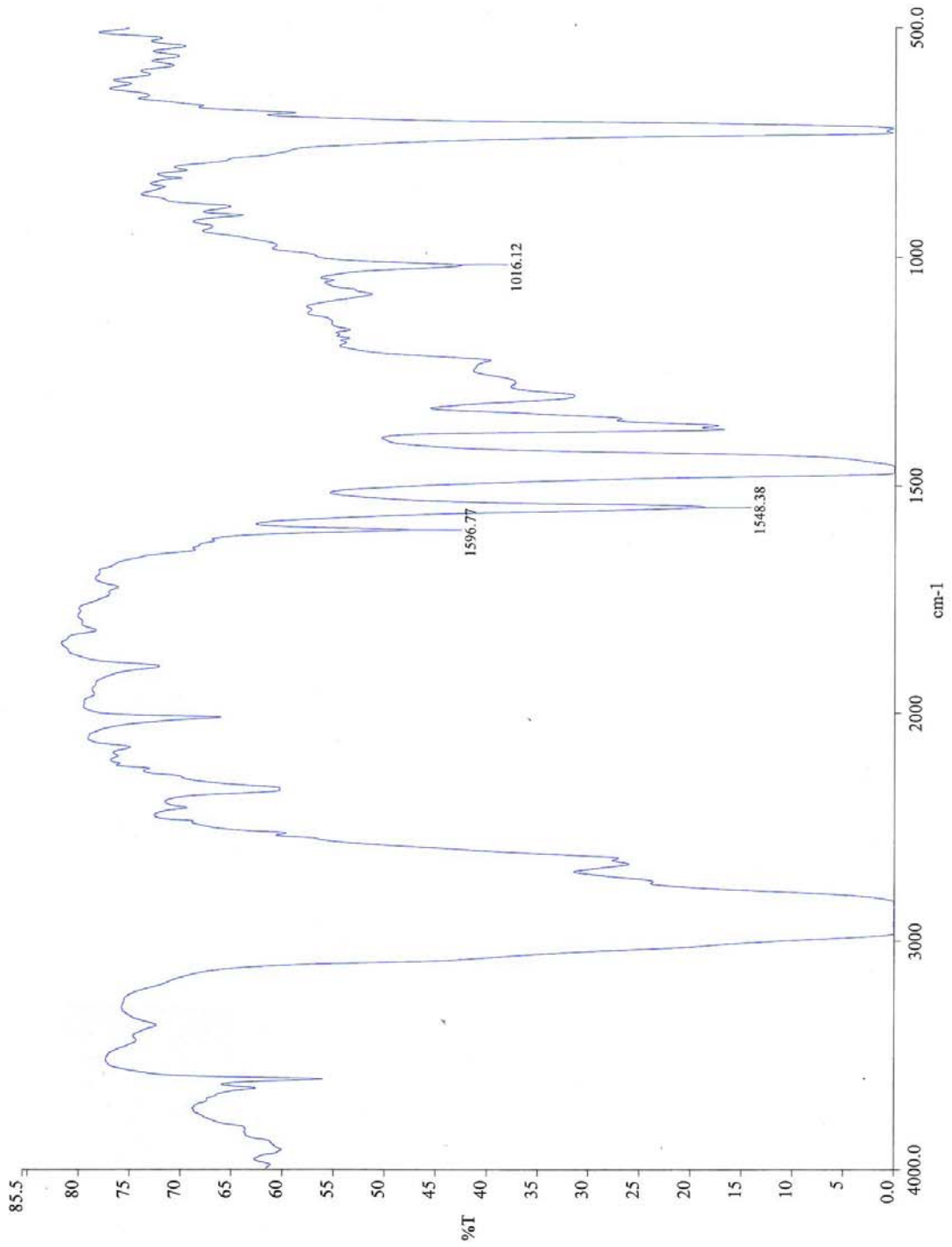


Figure 1. VIA Plug Grading Scheme

Results relate only to the items tested

Interpretations:

- 1) Based on the VIA test results, the Zormot film does not provide vapor-phase corrosion protection.
- 2) The Razor Blade test results determined that the Zormot film did not provide contact-phase corrosion protection for copper, but it did protect against corrosion for carbon steel.
- 3) The UV testing results will be included in a second report, as it takes some time for UV testing to be completed.
- 4) FTIR test results show that this film contains salt of carboxylic acid, probably sodium benzoate.



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