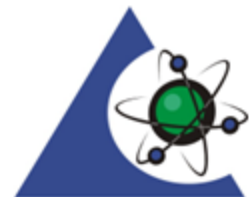




**ISO/IEC 17025:2017 Accredited**

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**PJLA  
Testing**

Accreditation # 116482

## ***Evaluation of Green Packaging Film Compared to VpCI-126 Film***

**To:** Jessica Carpenter  
Cortec Corporation

**For:** Joe Louisell  
Metals Preservation Group

**From:** Cortec Laboratories, Inc.  
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**Project #:** 24-046-1125

**Results reported by:**

Brian Benduha  
Lab Technician II

**Results approved by:**

Rick Shannon  
Technical Services Manager



**Background:**

A sample of green film manufactured by Green Packaging was submitted for testing compared to VpCI-126 film.

**Sample Received:**

1. Green Packaging film, 3mils

**Method:**

- NACE Standard VIA Test, TM 0208-2018
- Razor Blade Test, CC-004\*

\*The test marked is not covered under Cortec Laboratories, Inc. ISO 17025 Scope of Accreditation

**Materials:**

1. VIA test kit (testing jars with lid apparatus, steel plugs, 400grit sandpaper)
2. Buehler Plug Grinder, Ecomet V Polisher (manual turn table plug grinder)
3. VpCI-126 film, lot: 020240
4. Steel panels, SAE 1008/1010 (Q-Panel, S-35 DG, 3"x5"x0.032")
5. Copper panels
6. Glycerin (lot: Z01I006)
7. Methanol, ACS grade (CAS #67-56-1)
8. Scale I (0.0g)
9. Lint-free cotton wipes
10. DI water
11. Plain Polyethylene film
12. Calibrated thermometer (QA-CHQ-107)

**Procedure:**

All testing was conducted according to standard procedure.

**Results:****Razor Blade Test- Steel Panels**

Sample	Panel #1	Panel #2	Panel #3	End Result
Green Packaging Film	Pass	Pass	Pass	Pass
Cortec VpCI-126 Film	Pass	Pass	Pass	Pass
Control	Fail	-	-	Fail

**Razor Blade Test- Copper Panels**

Sample	Panel #1	Panel #2	Panel #3	End Result
Green Packaging Film	Fail	Fail	Fail	Fail
Cortec VpCI-126 Film	Pass	Pass	Pass	Pass
Control	Fail	-	-	Fail

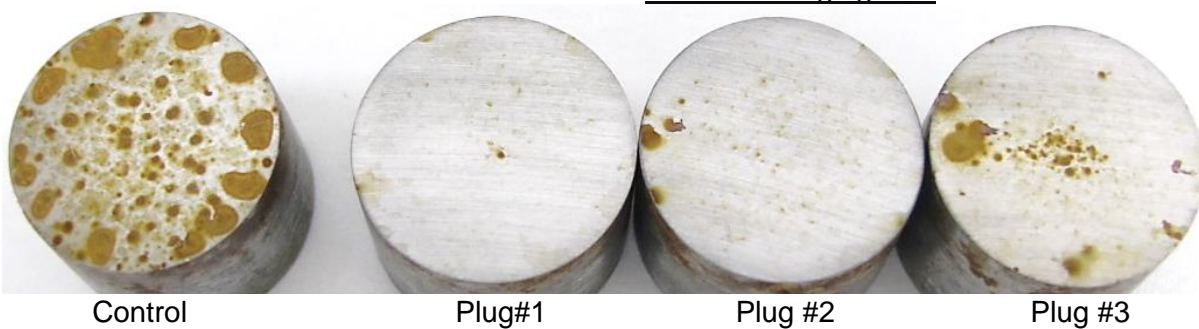
**Results:**

**NACE VIA Test**

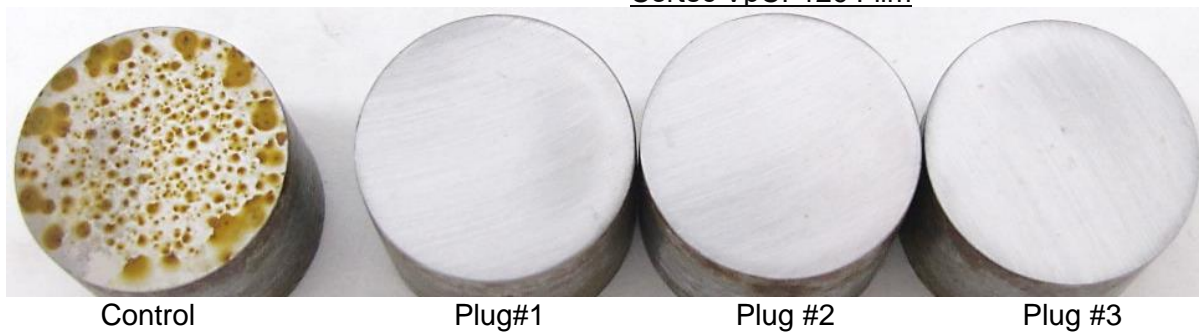
Sample	Plug #1	Plug #2	Plug #3	End Result
Green Packaging Film	Grade 1	Grade 1	Grade 1	Slight corrosion protective effect
Cortec VpCI-126 Film	Grade 3	Grade 3	Grade 2	Good corrosion protective effect
Control	Grade 0	-	-	No corrosion protective effect

**Photo of VIA plugs after testing:**

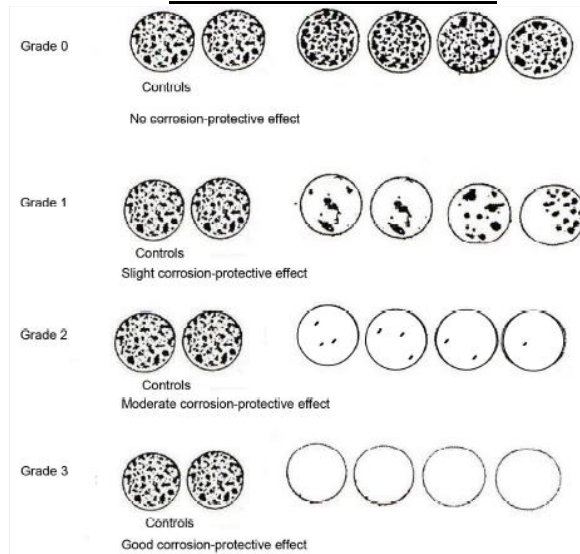
Green Packaging Film



Cortec VpCI-126 Film



## VIA Test Grades



### **Interpretations:**

The submitted film made by Green Packaging provides sufficient contact corrosion protection to pass the razor blade test for steel, but fails to protect for copper. For vapor phase corrosion protection, the Green Packaging film provides a slight corrosion protective effect according to the results of the NACE VIA test. In comparison, VpCI-126 film provides excellent contact and vapor phase corrosion protection.