



ISO/IEC 17025:2017 Accredited
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
cortecvci.com • corteclaboratories.com



PJLA
Testing
Accreditation # 116482

Comparing VCI-MX Film to VpCI-126 Film

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

cc: Boris Miksic
Cliff Cracauer
Jessi Meyer
Scott Bryan
Ivana Radic Borsic
Eric Uutala
Bob Boyle
Caleb Pheneger

Project #: 24-114-1125.bis

Results reported by:

Brian Benduha
Lab Technician II

Results approved by:

Pavlo Solntsev, Ph.D.
Laboratory Manager



Background:

Our customer currently uses a brand of VCI film called VCI-MX. The goal of this testing is to compare corrosion inhibiting properties of VCI-MX film from customer site versus VpCI-126 film.

Sample Received:

Blue VCI-MX Film, 3.5mils (gusseted bag, Width = 13inch, Depth = 12inch, Length = 27inch)

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-165)

Procedure:

All testing was conducted according to standard procedure.

Results:

Razor Blade Test- Steel Panels

Sample	Panel #1	Panel #2	Panel #3	End Result
VCI-MX Film	Fail	Fail	Fail	Fail
VpCI-126 Film	Pass	Pass	Pass	Pass
Control	Fail	-	-	Fail

Razor Blade Test- Copper Panels

Sample	Panel #1	Panel #2	Panel #3	End Result
VCI-MX Film	Fail	Fail	Fail	Fail
VpCI-126 Film	Pass	Pass	Pass	Pass
Control	Fail	-	-	Fail

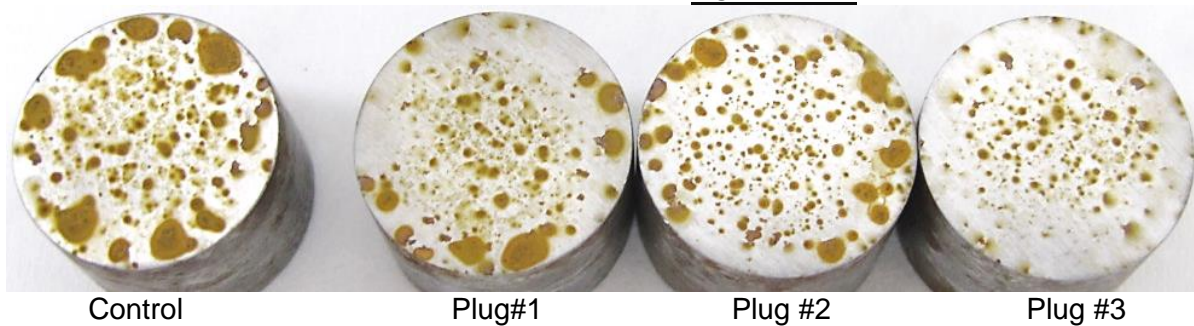
Results:

NACE VIA Test

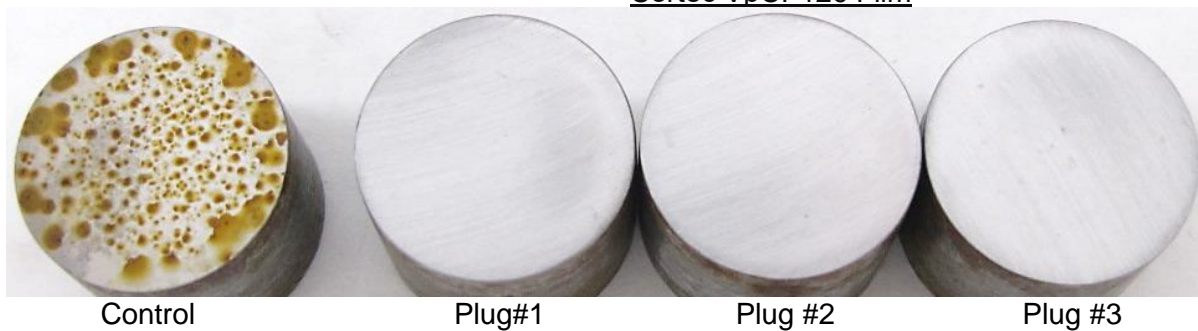
Sample	Plug #1	Plug #2	Plug #3	End Result	Pass / Fail
VCI-MX Film	Grade 0	Grade 0	Grade 1	Slight to no corrosion protective effect	Fail
VpCI-126 Film	Grade 3	Grade 3	Grade 2	Good corrosion protective effect	Pass
Control	Grade 0	-	-	No corrosion protective effect	Fail

Photo of VIA plugs after testing:

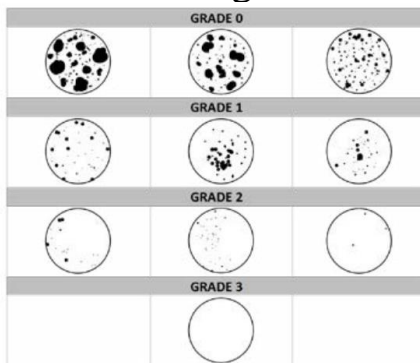
VCI-MX Film



Cortec VpCI-126 Film



VIA Rating Grades



Interpretations:

The submitted VCI-MX film does not provide sufficient corrosion protection to pass the razor blade test (contact phase) or the NACE VIA test (vapor phase). VpCI-126 film provides excellent contact and vapor phase corrosion protection.