



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

APEC Film Evaluation

To: Jess Carpenter

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

cc: Boris Miksic
Anna Vignetti
Cliff Cracauer

Project #: 13-011-1125.bis

Results reported by: *Brian Benduha*
Brian Benduha
Lab Technician

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

Date: January 25, 2013



Purpose: To test the submitted blue film, manufactured by APEC.

Sample Received: Blue film, 4mils

Method: 1) VIA Test CC-027
2) Razor Blade Test CC-004*
3) Nitrite/Nitrate Test*
4) FTIR analysis

*Cortec Laboratory is not accredited for the test marked

Materials: 1) VIA test kit
2) Razor blade test kit
3) Nitrite/Nitrate Test Strips (EMQuant lot #HC095141, expires 7-13)
4) Mil thickness gauge
5) Paragon 1000 FTIR

Procedure: The tests were conducted according to standard procedures for each test.

Results: Razor Blade Test- Carbon Steel Panels

Sample	Panel #1	Panel #2	Panel #3	End Result
APEC Blue Film, 4mils	Pass	Pass	Pass	Pass
Control	Fail	-	-	-

Razor Blade Test- Copper Panels

Sample	Panel #1	Panel #2	Panel #3	End Result
APEC Blue Film, 4mils	Pass	Pass	Pass	Pass
Control	Fail	-	-	-

VIA Test

Sample	Plug #1	Plug #2	Plug #3	End Result
APEC Blue Film, 4mils	Grade 1	Grade 0	Grade 0	Fail
Control	Grade 0	-	-	-

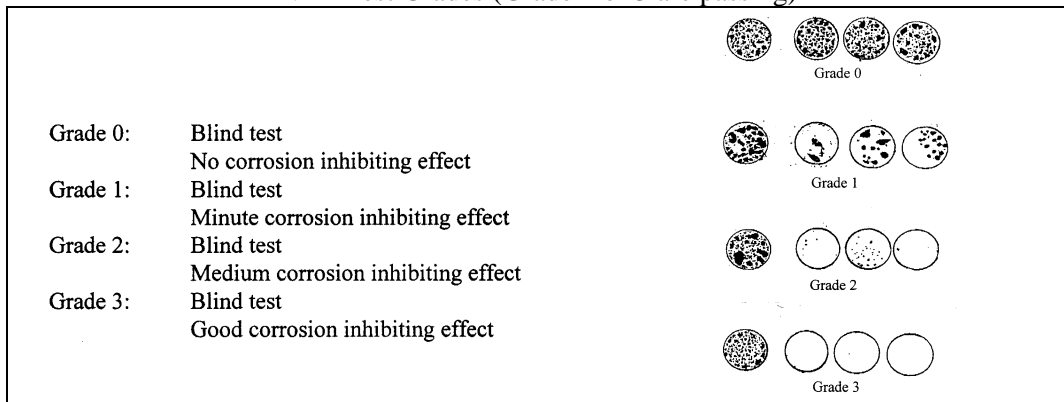
Note: The VIA grading system is attached to the end of the report

Nitrite Test

Sample	Results
APEC Blue Film, 4mils	Nitrite was found on one side of the film, which means the film was co-extruded.

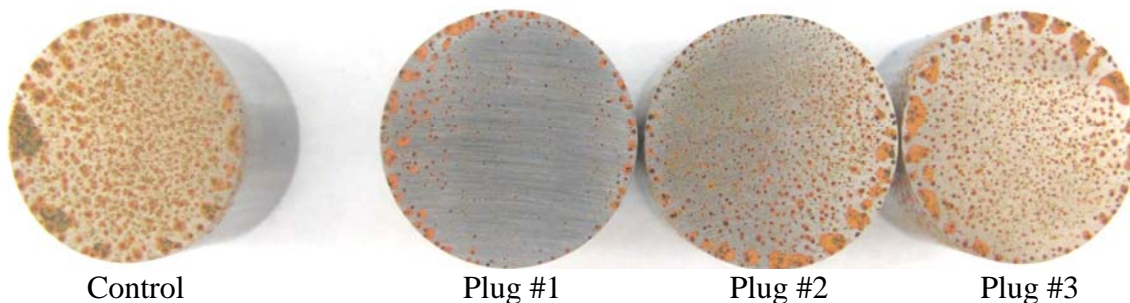
Interpretations: The submitted blue film made by APEC failed the VIA testing, but passed the razor blade tests. That means the film can be used for contact corrosion protection only. Based on FTIR this film is totally nitrite-based.

VIA Test Grades (Grade 2 or 3 are passing)



Photos:

APEC Blue Film



Control

Plug #1

Plug #2

Plug #3

FTIR Analysis:

