



Member of Cortec® Corporation Group

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Evaluation of VCI Film from VIAHIM

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Project #: EC 24-025-3125

Results reported by:

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Mirjana Kramar
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Results approved by:

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Antonia Đurin
Technical Service Engineer

Background:

Distributor has requested testing of the VIAHIM corrosion inhibiting film, produced in Bulgaria, that potential customer is currently using. VIA NACE testing, Razor Blade, and mechanical properties tests have been requested.

Sample Received:

The following sample received 20.05.2024. in good condition:

- VCI film

Method:

- Razor Blade Test, E-001*
- VIA NACE Test, E-020
- FTIR Test, E-032*

Mechanical tests were not performed due to small size of sample received.

*Cortec Method

Materials:

1. VIA NACE Test Kit
2. Razor Blade Test Kit
3. Glycerol (lot #P121003)
4. Methanol, ACS grade (lot #23A174014)
5. 0.005% NaCl
6. FT/IR-4X FTIR spectrometer JASCO

Procedure:

All testing was conducted according to standard procedure.

Results:

The following results were found:

Razor Blade Test- Carbon Steel Panels

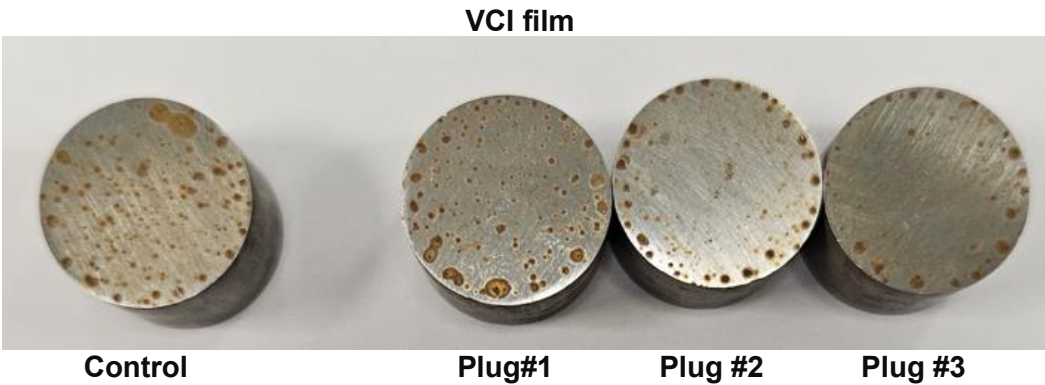
Sample	Panel #1	Panel #2	Panel #3	End Result
VCI film	Fail	Fail	Fail	Fail
Control	Fail	--	--	Fail

Razor Blade Test- Copper Panels

Sample	Panel #1	Panel #2	Panel #3	End Result
VCI film	Fail	Fail	Fail	Fail
Control	Fail	--	--	Fail

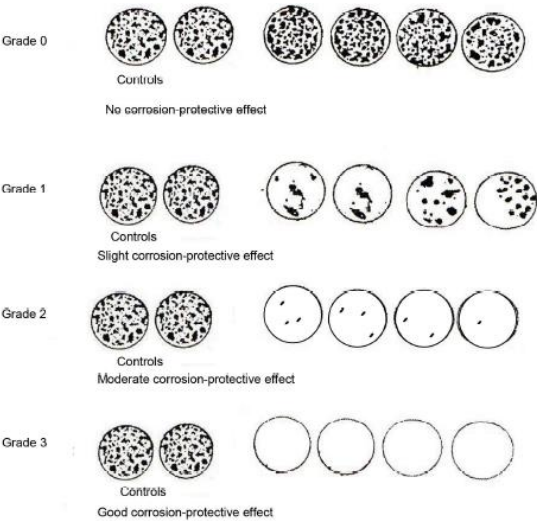
VIA NACE Test results				
Sample	Plug #1	Plug #2	Plug #3	End Result
VCI film	Grade 0	Grade 0	Grade 0	Fail
Control	Grade 0	--	--	Fail

Photos from VIA NACE Testing:

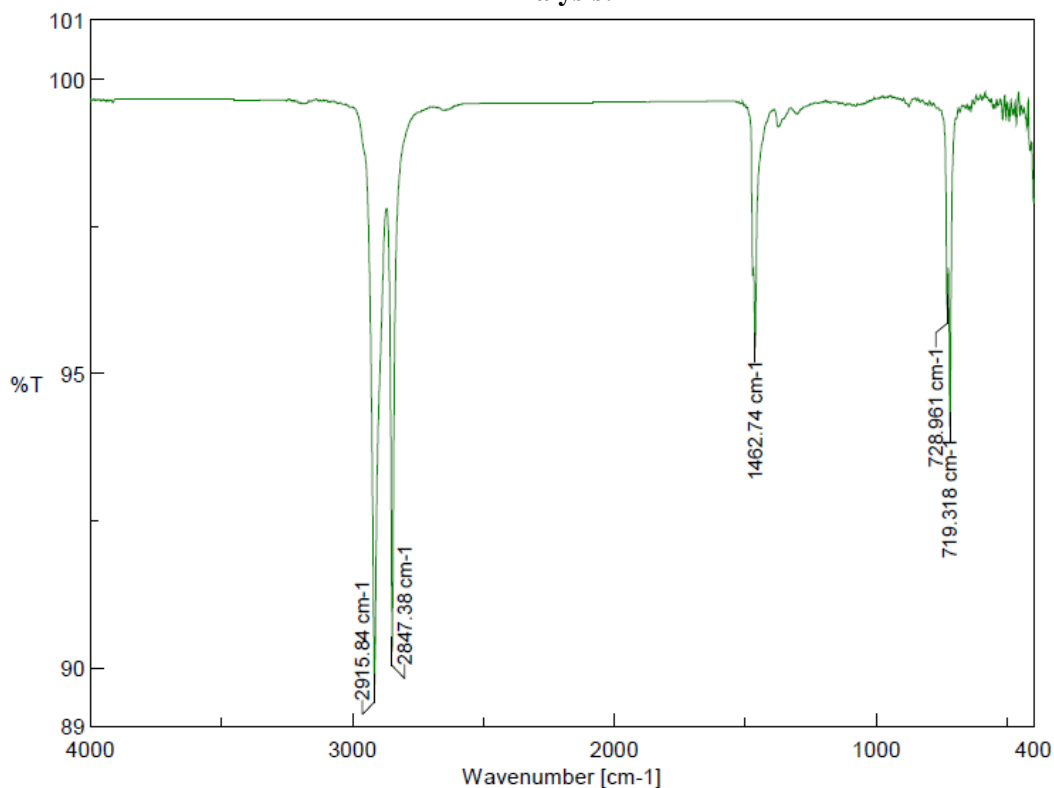


Control Plug#1 Plug #2 Plug #3

VIA Test Grades (Grade 2 or 3 are passing)
 All three plugs must be grade 2 or better to pass the test.



FTIR Analysis:



[Comments]
Sample name

Chimtec film

Chimtec film-[Noise Elimination]

Interpretations:

The submitted sample does not provide contact corrosion protection to pass the Razor blade test for steel and copper. It does not provide a corrosion protection effect according to the results of the VIA NACE test.

FTIR analysis of the film do not show the presence of inhibitors.

Sample size received was not big enough to conduct mechanical properties testing.