

Evaluation of Fuchs VCI film

Purpose: To evaluate the VCI properties of the submitted sample of Fuchs film and compare it to Cortec's VpCI-126 film.

Materials: Submitted sample of Fuch's VCI film
 Razor Blade Test Kit
 VIA Test Kit
 Perkin Elmer FT-IR 1000 Spectrometer

Method: Razor Blade Test
 VIA Test
 FT-IR Analysis

Procedure: The above tests were performed according to the standard procedures for each

Results: Razor Blade Test (carbon steel)

Material	Panel #1	Panel #2	Panel #3
Fuch's VCI film	Fail	Fail	Fail
Cortec's VpCI-126 film	Pass	Pass	Pass
Control	Fail	Fail	Fail

Razor Blade Test (copper)

Material	Panel #1	Panel #2	Panel #3
Fuch's VCI film	Fail	Fail	Fail
Cortec's VpCI-126 film	Pass	Pass	Pass
Control	Fail	Fail	Fail

VIA Test

Material	Panel #1	Panel #2	Panel #3
Fuch's VCI film	Grade 1	Grade 0	Grade 0
Cortec's VpCI-126 film	Grade 3	Grade 3	Grade 3
Control	Fail	Fail	Fail

Conclusion: The submitted sample of Fuchs VCI film failed to pass both the VIA and razor blade tests. According to the FT-IR spectra, Fuchs VpCI film contains some salts of carboxylic acids, but these salts do not provide sufficient protection.

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VIA Test Grades (Grade 2 or 3 are passing)

- Grade 0: Blind test
No corrosion inhibiting effect
- Grade 1: Blind test
Minute corrosion inhibiting effect
- Grade 2: Blind test
Medium corrosion inhibiting effect
- Grade 3: Blind test
Good corrosion inhibiting effect



Grade 0



Grade 1



Grade 2



Grade 3

FT-IR Analysis

Fuch's Film

