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Evaluating blue colored film manufactured by VCI Brasil

Background: Two films were submitted to Cortec Corporation. The films are blue colored and

constructed of LDPE plastic. Both films are labeled as VCI Brasil with one of the films

having the extra label Rio Negro.

Purpose: Evaluate the corrosion inhibition performance of submitted films

Method: Razor Blade Test

VIA Test SO₂ Test

Materials: Razor Blade Test Kit

VIA Test Kit SO₂ Test Kit

VCI Brasil labeled film (3 mil)

VCI Brasil and Rio Negro labeled film (4 mil)

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

Results:

Razor Blade Test

Material	Panel #1	Panel #2	Panel #3
Film labeled as VCI Brasil	Fail	Fail	Fail
Film labeled as VCI Brasil and Rio Negro	Fail	Fail	Pass
Cortec VpCI-126 film*	Pass	Pass	Pass
Control	Fail	Fail	Fail

^{*}Typical results for Cortec VpCI-126 film

VIA Test

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Material	Plug #1	Plug #2	Plug #3
Film labeled as VCI Brasil	Grade 2	Grade 2	Grade 1
Film labeled as VCI Brasil and Rio Negro	Grade 2	Grade 1	Grade 2
Cortec VpCI-126 film*	Grade 3	Grade 3	Grade 3
Control	Fail	Fail	Fail

^{*}Typical results for Cortec VpCI-126 film

SO₂ Test

So ₂ rest			
Material	Panel #1	Panel #2	Panel #3
Film labeled as VCI Brasil	Grade 1	Grade 1	Grade 2
Film labeled as VCI Brasil and Rio Negro	Grade 2	Grade1	Grade 1
Cortec VpCI-126 film*	Grade 4	Grade 4	Grade 4
Control	Fail	Fail	Fail

^{*}Typical results for Cortec VpCI-126 film

Conclusion: Based on the results above, VCI Brasil submitted films fail to provide sufficient

contact, barrier and vapor phase corrosion inhibition.

Project #: 05-215-1125





VIA Test Grades (Grade 2 or 3 are passing)

Grade 0: Blind test

No corrosion inhibiting effect

Grade 1: Blind test

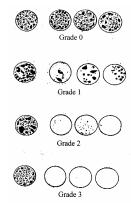
Minute corrosion inhibiting effect

Grade 2: Blind test

Medium corrosion inhibiting effect

Grade 3: Blind test

Good corrosion inhibiting effect



SO₂ Grades (Grade 3 and 4 are passing):

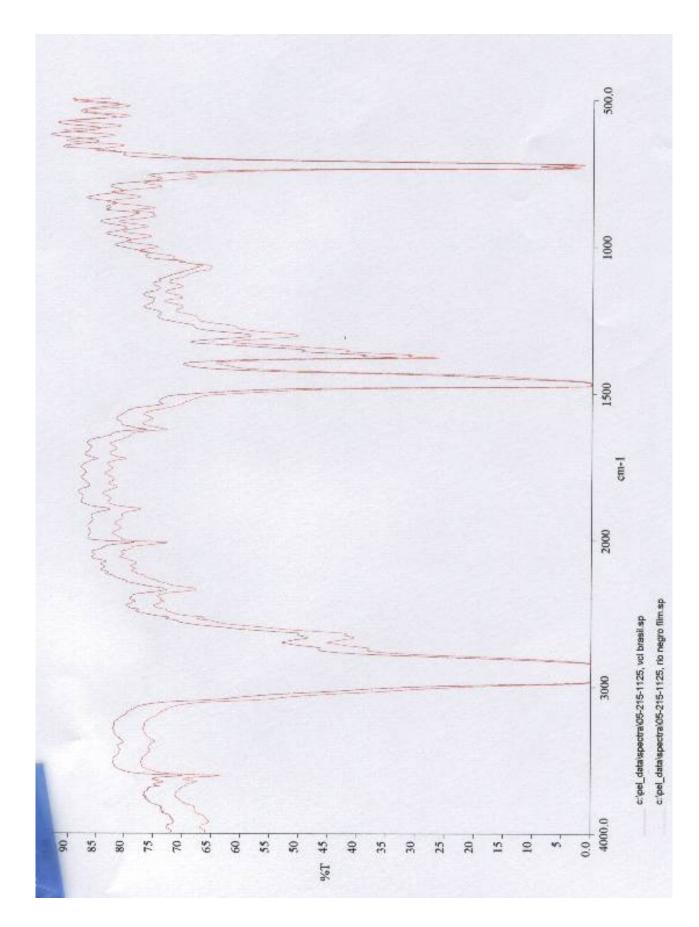
Grade 0- Extensive corrosion covering 25% or more of panel surface

Grade 1- Moderate corrosion covering 10-25% of panel surface

Grade 2- Slight corrosion covering 5-10% of panel surface

Grade 3- Very slight corrosion covering 0-5% of panel surface

Grade 4- No visible corrosion on panel surface



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