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
Internet http://www.cortecvci.com

Evaluation of Green Colored Caliburn Film

Background: Green colored Caliburn film was submitted to Cortec Corporation for a corrosion inhibition evaluation.

Purpose: Evaluate the corrosion inhibition of the Caliburn film.

Method: Razor Blade Test
VIA Test
SO_2 Test
FT-IR analysis

Materials: Razor Blade Test Kit
VIA Test Kit
SO_2 Test Kit
Perkin Elmer Paragon 1000 FT-IR Spectrometer

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

Results:

Razor Blade Test

Material	Panel #1	Panel #2	Panel #3
Caliburn film	Fail	Fail	Fail
Cortec VpCI-126 film	Pass	Pass	Pass
Control	Fail	Fail	Fail

VIA Test

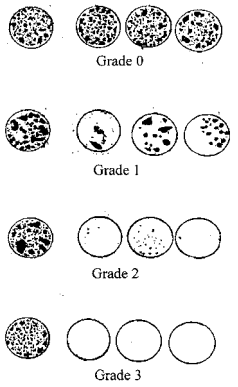
Material	Plug #1	Plug #2	Plug #3
Caliburn film	Grade 0	Grade 0	Grade 0
Cortec VpCI-126 film	Grade 3	Grade 3	Grade 3
Control	Fail	Fail	Fail

SO_2 Test

Material	Panel #1	Panel #2	Panel #3
Caliburn film	Grade 0	Grade 1	Grade 1
Cortec VpCI-126 film	Grade 4	Grade 4	Grade 4
Control	Fail	Fail	Fail

Conclusion: Caliburn film fails to provide contact, vapor and barrier phase corrosion inhibition. According to FT-IR analysis, film appears to contain a desiccant that absorbs some moisture, and insufficient amount of contact inhibitor is, probably, sodium benzoate.

VIA Test Grades (Grade 2 or 3 are passing)

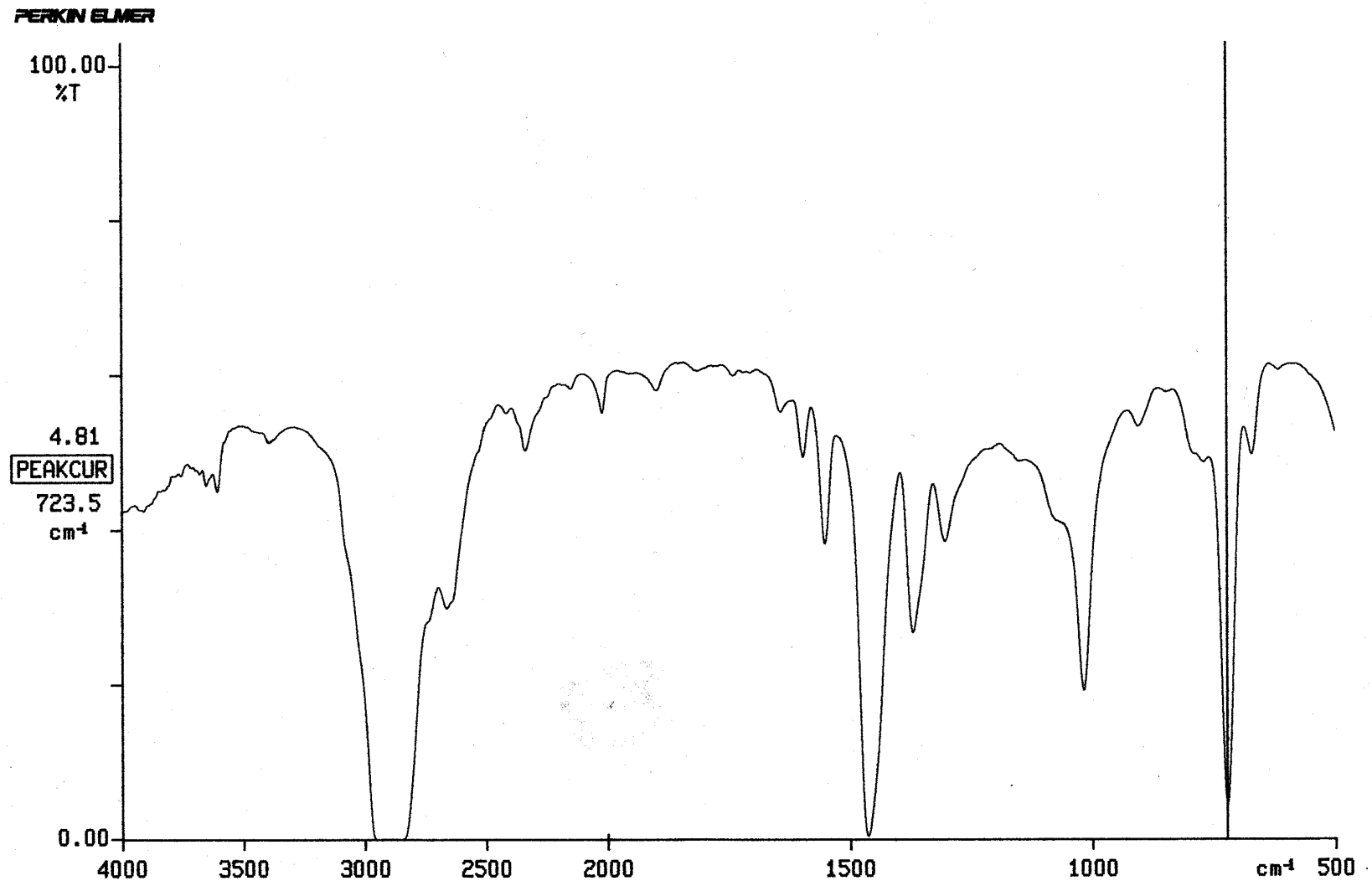


Grade 0: Blind test
No corrosion inhibiting effect
Grade 1: Blind test
Minute corrosion inhibiting effect
Grade 2: Blind test
Medium corrosion inhibiting effect
Grade 3: Blind test
Good corrosion inhibiting effect

SO_2 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

Project #: 03-166-1125

Estimated Cost of Project: 3 hours


PERKIN ELMER
100.00
%T
4.81
PEAKCUR
723.5
cm-1
0.00
4000
3500
3000
2500
2000
1500
1000
cm-1
500
03/08/01 10:27 QA
X: 8 scans, 16.0cm-1

03-166-1125