



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@cortecvc.com
Internet <http://www.cortecvc.com>

Evaluation of Film Submitted by Customer

Purpose: Evaluate anticorrosion properties of a blue opaque film manufactured in Italy by Propack and submitted by customer. The film is 4 mil thick and has printing "Propa Steel, A SPECIAL PLASTIC FOIL TO WRAP STEEL SUCCESSFULLY, www.propagroup.com" on one side.

Materials:

- 1) Submitted film
- 2) Carbon Steel Panels
- 3) Methanol-lab grade
- 4) Razor Blade test kit
- 5) VIA test kit
- 6) Perkin Elmer FTIR 1000 Spectrometer

Method:

- 1) Razor Blade test, CC-004
- 2) VIA test
- 3) FTIR Spectroscopy

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

Results:

FTIR

FTIR scanning reveals the film most likely contains salts of carboxylic acid.



Razor Blade Test Performed on Carbon Steel Panels

Sample	Panel 1	Panel 2	Panel 3
Submitted film	Fail	Fail	Fail
Control	Fail	-	-



VIA Test

Sample	Plug #1	Plug #2	Plug #3
Submitted film	Grade 0	Grade 0	Grade 2
Control	Grade 0	-	-

Note: VIA Grading system is attached below



Conclusion: The submitted film failed both Razor Blade Test and VIA Test, which means that it doesn't protect steel either in vapor or in contact phases.

Project #: 10-092-1125(bis)

From: Ming Shen

Date: April 30, 2010

cc: Boris Miksic
Anna Vignetti
Rita Kharshan
Mike Morin



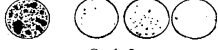
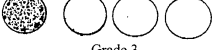
Project #: 10-092-1125(bis)

Page 3 of 5

May 3, 2010

© 2010, Cortec Corporation. All Rights Reserved. Copying of these materials in any form without the written authorization of Cortec Corporation is strictly prohibited.

VIA Test Grades (Grade 2 or 3 are passing)

<p>Grade 0: Blind test No corrosion inhibiting effect</p>	 <p>Grade 0</p>
<p>Grade 1: Blind test Minute corrosion inhibiting effect</p>	 <p>Grade 1</p>
<p>Grade 2: Blind test Medium corrosion inhibiting effect</p>	 <p>Grade 2</p>
<p>Grade 3: Blind test Good corrosion inhibiting effect</p>	 <p>Grade 3</p>

