

## *Evaluating films submitted by Cortec Russia*

**Background:** Sergey Budnitsky/Cortec Russia submitted a blue colored laminated film to Cortec Corporation. The film is co-extruded and rigid in appearance.

**Purpose:** Evaluate the corrosion inhibition performance of submitted film

**Method:** Razor Blade Test  
 VIA Test  
 SO<sub>2</sub> Test  
 FT-IR Spectroscopy

**Materials:** Razor Blade Test Kit  
 VIA Test Kit  
 SO<sub>2</sub> Test Kit  
 Perkin Elmer FT-IR Spectrometer Paragon 1000

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

**Results:**

Razor Blade Test

Material	Panel #1	Panel #2	Panel #3
Submitted laminated film (blue), 2.5 mil	Pass	Pass	Pass
Control	Fail	Fail	Fail

VIA Test

Material	Plug #1	Plug #2	Plug #3
Submitted laminated film (blue), 2.5 mil*	Grade 3	Grade 3	Grade 3
Control	Fail	Fail	Fail

\* Film difficult to prevent from curling during testing.

SO<sub>2</sub> Test

Material	Panel #1	Panel #2	Panel #3
Submitted laminated film (blue), 2.5 mil	Grade 4	Grade 4	Grade 4
Control	Fail	Fail	Fail

FT-IR Spectroscopy: See attached

**Conclusion:** Submitted blue colored laminated film provides excellent corrosion inhibition.

**Project #:** 05-242-1125(3)

**Estimated Cost of Project:** 3 hours

**To:** Sergey Budnitsky/Cortec Russia







**From:** Bob Berg

**Date:** 12/13/05

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**VIA Test Grades (Grade 2 or 3 are passing)**

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

*SO<sub>2</sub> 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

