

ENVIRONMENTAL

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SYSTEM REGISTERED

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9 White Bear Po ne: (651) 429-1 Free: (800) 4-C ecvci.com • cort	ırkway, St. Paul, MN 55110 USA 100, Fax: (651) 429-1122 ORTEC, E-mail: info@cortecvci.com eclaboratories.com	
	Evaluation of Daubert Film	
То:	Bob Dessauer	
From:	Cortec Corporation Laboratories 4119 White Bear Parkway St. Paul, MN 55110	
cc:	Boris Miksic Cliff Cracauer Andrew Wroblewski Joe Louisell	
Project	#:14-023-1125.bis	
Results	reported by: diz Austin Liz Austin Senior Lab Technician	
Approv	ed by: Eric Uutala Technical Service Manager	
Date:	March 7, 2014	

Background: It was requested that the submitted Daubert bag be tested for corrosion inhibition.

Sample Received:

1) Daubert bag, good condition, received 02-25-14, 4 mils

Method:

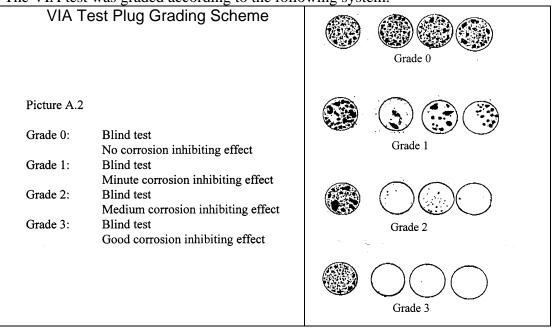
- 1) VIA Test Method, CC-027
- 2) Razor Blade Test Method, CC-004*
- 3) Paragon 1000 FTIR, Method CC-006
- 4) Nitrite Test*
 - *Cortec Laboratory is not accredited for the test marked

Materials:

- 1) VIA Test Kit
- 2) Razor Blade test kit
- 3) Methanol, lab grade
- 4) Nitrite Test Strips, from VWR, part number EMD-10020-1
- 5) Deionized Water
- 6) Paragon 1000 FTIR
- 7) Plain polyethylene, control film
- 8) VpCI-126 lot# 33659

Procedure:

- 1) The tests were performed according to standard procedure. The Daubert film was tested as a monolayer film, with 1"x6" strips. The VpCI-126 was tested as part of the random QA testing.
- 2) The VIA test was graded according to the following system:



Results:

Kazor blaue rest – Carbon Steel					
Sample	Panel 1	Panel 2	Panel 3		
Daubert Bag	Pass	Pass	Pass		
VpCI-126	Pass	Pass	Pass		
Control	Fail	-	-		

Razor Blade Test - Carbon Steel

Razor Blade Test – Copper

Sample	Panel 1	Panel 2	Panel 3
Daubert Bag	Fail	Fail	Fail
VpCI-126	Pass	Pass	Pass
Control	Fail	-	-

VIA Test

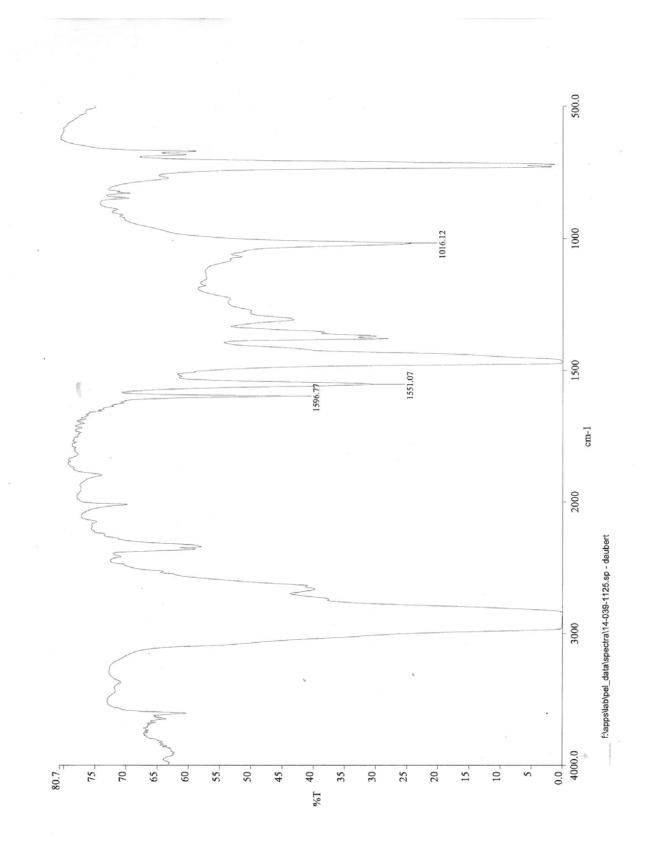
Sample	Plug # 1	Plug # 2	Plug # 3	Pass / Fail			
Daubert Bag	Grade 0	Grade 0	Grade 0	Fail			
VpCI-126	Grade 3	Grade 3	Grade 3	Pass			
Control	Grade 0	Grade 0	N/A	N/A			

Note: Grades 0 and 1 are considered failing. See below for grading scale example.

Results relate only to the items tested

Interpretations:

- 1. Based on the razor blade test results, the submitted Daubert bag provides good contact-phase corrosion protection for carbon steel, but does not protect copper.
- 2. The VIA test results determined that the Daubert film did not provide vapor-phase corrosion protection.
- 3. The FTIR results determined that the film contains sodium salt of carboxylic acid. The Daubert film also contains nitrite.



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