



NEWS ALERT

Report on Failed Daubert Film Underscores Importance of Cortec's Quality Standards



A recent test report showing the failure of Daubert's film underscores the importance of Cortec's quality control procedures for delivering high quality products. The test was requested when a producer of transmission parts for the automotive industry was experiencing rust on the edge of its parts despite using Daubert's VCI (Vapor Corrosion Inhibitor) film. The customer sent film samples to Cortec® to determine if the VCI films really provided corrosion protection.

Daubert's films failed two razor blade tests and a VIA test performed by Cortec® Laboratories. The razor blade tests were performed on carbon steel panels and copper panels to evaluate the films' protection when touching the metals in the presence of a corrosive element. The films failed in both tests. A VIA test was also performed to evaluate how well the film protects metals that are not in direct contact with the film in a humid environment. Again Daubert films failed the test, showing on three counts why the producer of transmission parts had been experiencing corrosion problems.

While the Daubert film passes some testing performed by Cortec® Laboratories, inconsistency in corrosion protection calls into question the performance and quality of the material. In contrast, Cortec's high quality standards require that all of its VpCI® film passes the VIA and razor blade tests before it can be shipped to customers, to ensure customers can have the best possible protection for their metal goods and assets.

Cortec® Corporation is the global leader in innovative, environmentally responsible VpCI® and MCI® corrosion control technologies for the Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil & Gas, and other industries. Headquartered in St. Paul, Minnesota, Cortec® manufactures over 400 products distributed worldwide. ISO 9001 and ISO 14001 Certified, and ISO 17025 Accredited.





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Daubert Film Evaluation

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For: Customer

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Project #: 18-142-1125.bis

Results reported by:

A handwritten signature in black ink that reads "Brian Benduha".

Brian Benduha
Lab Technician

Approved by:

A handwritten signature in blue ink that reads "John Wulterkens".

John Wulterkens
Technical Service Engineer



Background: Two samples of Daubert film were submitted for testing. The customer that is using these films is making transmission parts for the automotive industry. However, they are getting rust on the edge of their parts. The films were purchased from Apac, and were submitted to determine if they provide any corrosion protection.

Samples Received: The following samples were received on 7-6-18 in good condition:

1. Green Daubert film, 2mil
2. Blue Daubert film, 4mil

Method: VIA Test, CC-027
Razor Blade Test, CC-004*
Nitrite/Nitrate Test*
*The tests marked are not covered under Cortec Laboratories, Inc. ISO 17025 Scope of Accreditation

Materials: VIA test kit (testing jars and lids, steel plugs, 320grit sandpaper)
Copper and Carbon Steel panels, SAE 1010 (for razor blade testing)
Glycerol (lot #Q10A018)
Methanol, ACS grade (lot #071417B)
Nitrite/Nitrate Test Strips (lot #HC719626)
Plain polyethylene film (control film)
40°C oven (oven #5)

Procedure: The testing was conducted according to standard procedures for each test.
Note- the VIA test was conducted using two strips of sample per jar (1" X 6" per strip)

Results: The following results were found:

Razor Blade Test- Carbon Steel Panels

Sample	Panel #1	Panel #2	Panel #3	End Result
Green Daubert Film	Fail	Fail	Fail	Fail
Blue Daubert Film	Fail	Fail	Fail	Fail
Control	Fail	-	-	Fail

Razor Blade Test- Copper Panels

Sample	Panel #1	Panel #2	Panel #3	End Result
Green Daubert Film	Fail	Fail	Fail	Fail
Blue Daubert Film	Fail	Fail	Fail	Fail
Control	Fail	-	-	Fail

VIA Test

Sample	Plug #1	Plug #2	Plug #3	End Result
Green Daubert Film	Grade 1	Grade 1	Grade 0	Fail
Blue Daubert Film	Grade 1	Grade 1	Grade 0	Fail
Control	Grade 0	-	-	Fail

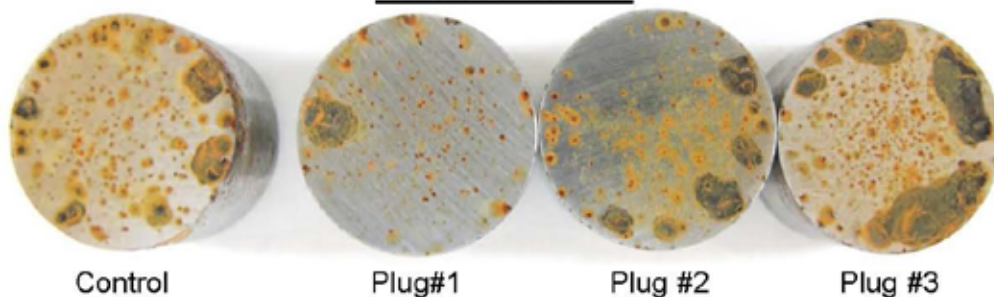
Results: The following results were found:

Nitrite/Nitrate Test Strips

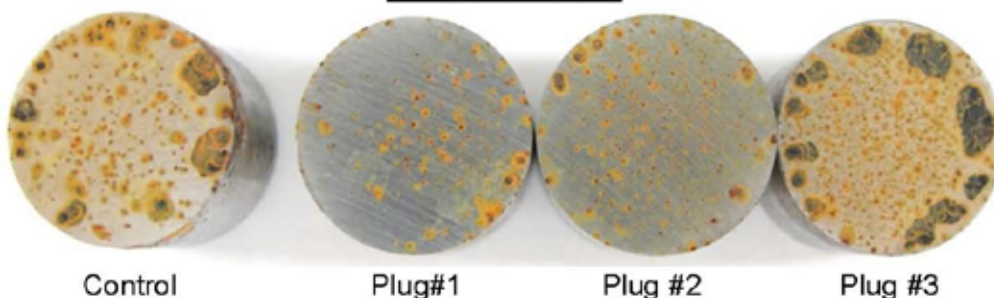
Sample	Results
Green Daubert Film	Does not contain any nitrite or nitrate
Blue Daubert Film	Does not contain any nitrite or nitrate

Photo from the VIA test:


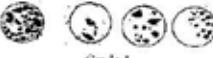


Green Daubert Film



Blue Daubert Film



VIA Test Grades (Grade 2 and 3 are passing)

Grade 0:	Blind test No corrosion inhibiting effect	 Grade 0
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

Interpretations: The two submitted Daubert film samples do not provide sufficient corrosion protection to pass the VIA or razor blade testing.