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Analysis of VCI Content in Hirschvogel Inc. Blue Film

From: Cortec Corporation Laboratories
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Project #: 12-209-1125.bis

Test conducted by:

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Approved by:

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Laboratory Director

Date: September 28, 2012



Background: A blue polyethylene film, used by customer, was sent to Cortec for determination of VCI content in the film. The film is labeled as containing VCI but the customer believes that it does not.

Sample Received: Blue polyethylene film (3-mil) made by Hirschvogel Inc.

Method: VIA Test (CC-027)
Razor Blade Test (CC-004)*
FTIR Test (CC-006)
*Cortec Laboratory is not accredited for the test marked

Materials: Blue film sample
VIA Test kit
1010 carbon steel panels
Copper panels
Laboratory grade methanol
Paragon 1000 FTIR

Procedure: VIA, FTIR, and Razor Blade testing were performed according to their respective work instructions.

Results: The following results were found:

VIA Test

Sample	Plug #1	Plug#2	Plug#3	Pass/Fail
Hirschvogel Inc. Blue Film	Grade 1	Grade 0	Grade 1	Fail
Control (plain polyethylene film)	Grade 0	N/A	N/A	Fail

Note: Grades 0 and 1 are considered failing.

Razor Blade Test – Copper

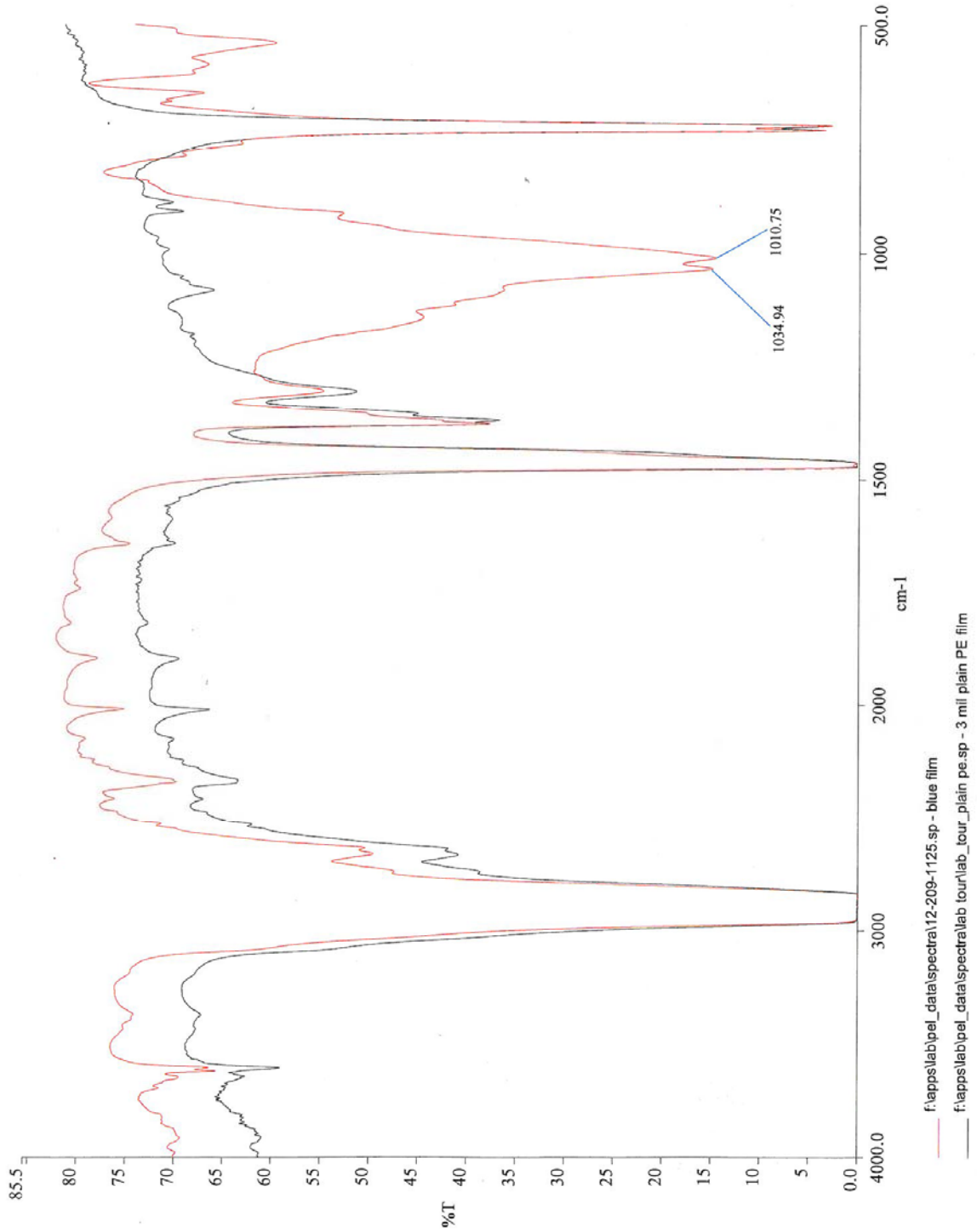
Sample	Panel 1	Panel 2	Panel 3
Hirschvogel Inc. Blue Film	Fail	Fail	Fail

Razor Blade Test – Steel

Sample	Panel 1	Panel 2	Panel 3
Hirschvogel Inc. Blue Film	Fail	Fail	Fail

Interpretations: According to our tests, the Hirschvogel Inc. blue polyethylene film used by customer does not contain vapor corrosion inhibitors (VCIs). The FTIR results display a peak at about 1020 cm-1 which would indicate that the film contains desiccant. This is not a substitute for vapor corrosion inhibitors; therefore, it would be better if this film was not labeled as a VCI film.

FTIR Test Result



Label Stating it is a VCI Film

HIRSCHVOGEL INCORPORATED

120BG5496ACP2

P/N:

54X44X96 .003 BLUE TINT **VCI** BAG 25/

Job#: 084130-001 Roll#: 22

Bags/Roll: 25

SO: 56912-1 PO# 400015522

MFD: 06/28/12



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