

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@cortecvci.com Internet http://www.cortecvci.com

# Evaluating EcoCorr Film manufactured in fourth quarter of 2006

**Background:** Long term stability and corrosion inhibition tests are sought on EcoCorr

Film. A two year old sample of EcoCorr Film sample was obtained for this testing. EcoCorr film sample was manufactured in the fourth quarter

of 2006.

**Purpose:** Determine corrosion inhibition performance and mechanical properties of

two year old EcoCorr Film

**Method:** Razor Blade Test

VIA Test SO<sub>2</sub> Test

ASTM D 1748-83

**Materials:** Razor Blade Test Kit

VIA Test Kit SO<sub>2</sub> Test Kit

EcoCorr Film manufactured in fourth quarter of 2006 (2.5-3.0 mil) VpCI-126 Film (3.0 mil), Lot #24034, manufactured first quarter,

2007

LDPE Control film (3 mil)

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

each.

#### **Results:**

#### Razor Blade Test

Material	Panel #1	Panel #2	Panel #3
EcoCorr Film (2.5-3.0 mil)	Pass	Pass	Pass
VpCI-126 Film (3.0 mil)	Pass	Pass	Pass
Control Film (3.0)	Fail	Fail	Fail

### VIA Test

Material	Plug #1	Plug #2	Plug #3
EcoCorr Film (2.5-3.0 mil)	Grade 3	Grade 3	Grade 3
VpCI-126 Film (3.0 mil)	Grade 3	Grade 3	Grade 3
Control Film (3.0)	Fail	Fail	Fail





## SO<sub>2</sub> Test

Material	Panel #1	Panel #2	Panel #3
EcoCorr Film (2.5-3.0 mil)	Grade 4	Grade 4	Grade 4
VpCI-126 Film (3.0 mil)	Grade 4	Grade 4	Grade 4
Control Film (3.0)	Fail	Fail	Fail

### ASTM D 1748-83

Material	Time until corrosion (Days)	
EcoCorr Film (2.5-3.0 mil)	> 15*	
VpCI-126 Film (3.0 mil)	> 15*	
Control Film (3.0)	4	

<sup>\*</sup> No corrosion observed after fifteen days, testing still in progress.

#### **Conclusion:**

A roughly two year old sample of EcoCorr Film provides excellent corrosion inhibition. Further testing is being conducted this particular EcoCorr film, and test results will be on final test report.

**Project #:** 08-085-1125 (preliminary testing)

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





Grade 0: Blind test

No corrosion inhibiting effect

Grade 1: Blind test

Minute corrosion inhibiting effect

Grade 2: Blind test

Medium corrosion inhibiting effect

Grade 3: Blind test

Good corrosion inhibiting effect













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