

PURAFIL ENVIRONMENTAL CORROSION REPORT

21-Oct-2010

Company: 115709

Sales Order #: C002697

CCC Panel #: P68022

Date In: 23-Sep-2010

Date Out: 07-Oct-2010

Days In Service: 14

Room Area ID: Master

Reference #:

115709

DO NOT TOUCH METAL COUPON

Corrosion Classification Coupon

Company	
Address	
Room/Area I.D. <i>Master</i>	
Date In <i>9/23/10</i>	Time In: <i>11:45</i> a.m. p.m.
Date Out <i>10/7/10</i>	Time Out: <i>9:27</i> a.m. p.m.
Coupon # <i>68022</i>	Tracking # <i>02697</i>
Serial #	
<input type="checkbox"/> Industrial <input type="checkbox"/> ERM <input type="checkbox"/> Preservation <input type="checkbox"/> CIF	

PURAFIL
First...in clean air

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CCC Panel # P68022
ISA Class G1
Mild

Copper Corrosion
274 Å/30 Days
Silver Corrosion
311 Å/30 Days

(see next page for complete analysis)

Summary for PURAFIL CCC # P68022

The electrolytic reduction analysis on Corrosion Classification Coupon #P68022 shows the presence of only very low concentrations of contaminants in the environment tested. The hydrogen sulfide level is not expected to exceed 3 ppb and the sulfur dioxide level should be less than 10 ppb. During the test period, corrosion, as shown by the copper coupon, is not a factor in determining equipment reliability.

Please note: Copper's reactivity is sensitive to temperature and relative humidity and can therefore exhibit seasonal variation. For example, below 30% relative humidity (typical for heated indoor air in winter), copper readings will be dramatically reduced. However, silver's reactivity is not affected by temperature and relative humidity. Due to the elevated level of film growth on the silver coupon, corrosion may be a factor in determining equipment reliability; continued monitoring is recommended.

Your local representative for additional information and assistance is:

Environmental Health and Eng
117 Fourth Avenue, Needham MA 02494, USA
tminegishi@eheinc.com

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Email: purafil@purafil.com / Internet: http://www.purafil.com

PURAFIL CCC # P68022 Analysis Results

Corrosion Film Composition				Gold Coupon - Magnified 20x
	Projections			
	<u>30 Days</u>	<u>1 Year</u>	<u>5 Year</u>	
Copper Films				
Cu ₂ S	0 Å	0 Å	0 Å	
Cu ₂ O	188 Å	251 Å	328 Å	
Unknowns	86 Å	115 Å	150 Å	
Totals	274 Å	366 Å	478 Å	
Silver Films				
AgCl	0 Å	0 Å	0 Å	
Ag ₂ S	311 Å	3782 Å	18912 Å	
Unknowns	0 Å	0 Å	0 Å	
Totals	311 Å	3782 Å	18912 Å	

Gold Pore Corrosion:
 Note: 1000 Å = 0.1 micron

Equipment Reliability Correlation
 (ISA Standard S71.04-1985 for Copper)

