

# PURAFIL ENVIRONMENTAL CORROSION REPORT

28-Oct-2010

Company: 115499

Sales Order #: C002697  
 CCC Panel #: P68020  
 Date In: 21-Sep-2010  
 Date Out: 06-Oct-2010  
 Days In Service: 15

Room Area ID:  
 Reference #:



**CCC Panel # P68020**

**ISA Class G2**  
Moderate

**Copper Corrosion**  
927 Å/30 Days

**Silver Corrosion**  
664 Å/30 Days

(see next page for complete analysis)

### Summary for PURAFIL CCC # P68020

The electrolytic reduction analysis on Corrosion Classification Coupon #P68020 shows the presence of moderate concentrations of contaminants and high/variable humidity in the environment tested. The hydrogen sulfide level is expected to range between 3 and 10 ppb, sulfur dioxide between 10 and 100 ppb, and chlorine between 1 and 2 ppb. The presence of moisture and small amounts of inorganic chlorine compounds greatly accelerates sulfide corrosion. The effects of corrosion are measurable and may be a factor in determining equipment reliability.

Your local representative for additional information and assistance is:

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

---

Purafil, Inc. / 2654 Weaver Way, Doraville GA 30340 USA / (770) 662-8545 / (770) 263-6922  
 Email: purafil@purafil.com / Internet: http://www.purafil.com

---

Displaying Page 1    [Display Page 2](#)

**PURAFIL CCC # P68020 Analysis Results**

<b>Corrosion Film Composition</b>				<b>Gold Coupon - Magnified 20x</b>
	Projections			
	30 Days	1 Year	5 Year	
<b>Copper Films</b>				
Cu <sub>2</sub> S	0 Å	0 Å	0 Å	
Cu <sub>2</sub> O	237 Å	826 Å	1846 Å	
Unknowns	690 Å	2407 Å	5383 Å	
Totals	927 Å	3233 Å	7229 Å	
<b>Silver Films</b>				
AgCl	75 Å	919 Å	4593 Å	
Ag <sub>2</sub> S	589 Å	7174 Å	35871 Å	
Unknowns	0 Å	0 Å	0 Å	
Totals	664 Å	8093 Å	40464 Å	
<b>Gold Pore Corrosion:</b>				
Note: 1000 Å = 0.1 micron				

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

