

PURAFIL ENVIRONMENTAL CORROSION REPORT

29-Oct-2010

Company: 115591

Sales Order #: C002687

CCC Panel #: P67627

Room Area ID: Living Room

Date In: 22-Sep-2010

Date Out: 06-Oct-2010

Reference #:

Days In Service: 14



CCC Panel # P67627

ISA Class GX
Severe

Copper Corrosion
2186 Å/30 Days

Silver Corrosion
2728 Å/30 Days

(see next page for complete analysis)

Summary for PURAFIL CCC # P67627

The electrolytic reduction analysis on Corrosion Classification Coupon #P67627 shows the presence of extremely high concentrations of contaminants and the possibility of high/variable humidity in the environment tested. The hydrogen sulfide level is expected to be in excess of 50 ppb, sulfur dioxide greater than 300 ppb, and chlorine greater than 10 ppb. The presence of moisture and small amounts of inorganic chlorine compounds greatly accelerates sulfide corrosion. Electronic/electrical equipment is not expected to survive in this environment due to corrosive attack.

Your local representative for additional information and assistance is:
 Environmental Health and Eng
 117 Fourth Avenue, Needham MA 02494, USA
 tmnegishi@eheinc.com

Purafil, Inc. / 2654 Weaver Way, Doraville GA 30340 USA / (770) 662-8545 / (770) 263-6922
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PURAFIL CCC # P67627 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	651 Å	1553 Å	3472 Å	
Cu ₂ O	280 Å	668 Å	1493 Å	
Unknowns	1255 Å	2990 Å	6686 Å	
Totals	2186 Å	5211 Å	11651 Å	
Silver Films				
AgCl	684 Å	8327 Å	41637 Å	
Ag ₂ S	2044 Å	24890 Å	124452 Å	
Unknowns	0 Å	0 Å	0 Å	
Totals	2728 Å	33217 Å	166089 Å	
Gold Pore Corrosion:				
Note: 1000 Å = 0.1 micron				

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

