

PURAFIL ENVIRONMENTAL CORROSIVITY REPORT

10-Jun-2010

Company: 110976

Sales Order #: C002687
CCC Panel #: P67643
Date In: 19-May-2010
Date Out: 02-Jun-2010
Days In Service: 14

Room Area ID:
Reference #:

CCC Panel # P67643

ISA Class G1
Mild



Copper Corrosion
259 Å/30 Days

Silver Corrosion
346 Å/30 Days

(see next page for complete analysis)

Summary for PURAFIL CCC # P67643

The electrolytic reduction analysis on Corrosion Classification Coupon #P67643 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
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PURAFIL CCC # P67643 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	147 Å	197 Å	258 Å	
Unknowns	112 Å	149 Å	195 Å	
Totals	259 Å	346 Å	453 Å	
Silver Films				
AgCl	0 Å	0 Å	0 Å	
Ag ₂ S	307 Å	3734 Å	18668 Å	
Unknowns	39 Å	476 Å	2381 Å	
Totals	346 Å	4210 Å	21049 Å	
Gold Pore Corrosion:				
Note: 1000 Å = 0.1 micron				

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

