

PURAFIL ENVIRONMENTAL CORROSIVITY REPORT

10-Jun-2010

Company: 111017

Sales Order #: C002682
CCC Panel #: P67432
Date In: 20-May-2010
Date Out: 04-Jun-2010
Days In Service: 15

Room Area ID:
Reference #:



DO NOT TOUCH METAL COUPON

Corrosion Classification Coupon

Company	
Address	
Room/Area ID: 111017	
Date In: 5/20/10	Time In: a.m. 10:20 p.m.
Date Out: 6/4/10	Time Out: 10:15 a.m. p.m.
Coupon #: 67432	Tracking #: 02682
Serial #	
☐ Industrial ☐ ERM ☐ Preservation ☐ CIF	

PURAFIL
First...in clean air

2654 Weaver Way • Doraville, Georgia 30340
Ph: (770) 662-8545 • (800) 222-6367
Fx: (770) 263-6922 • www.purafil.com

CCC Panel # P67432

ISA Class G1
Mild

Copper Corrosion
277 Å/30 Days

Silver Corrosion
325 Å/30 Days

(see next page for complete analysis)

Summary for PURAFIL CCC # P67432

The electrolytic reduction analysis on Corrosion Classification Coupon #P67432 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. The analysis shows only a trace of chlorine, however, particular care must be given to equipment exposed to atmospheres containing chlorinated contaminants. 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

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

PURAFIL CCC # P67432 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	140 Å	189 Å	247 Å	
Unknowns	137 Å	185 Å	241 Å	
Totals	277 Å	374 Å	488 Å	
Silver Films				
AgCl	44 Å	530 Å	2650 Å	
Ag ₂ S	187 Å	2278 Å	11388 Å	
Unknowns	94 Å	1150 Å	5751 Å	
Totals	325 Å	3958 Å	19789 Å	
Gold Pore Corrosion:				
Note: 1000 Å = 0.1 micron				

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