

FR4 Test 12/1/2010 – 12/17/2010

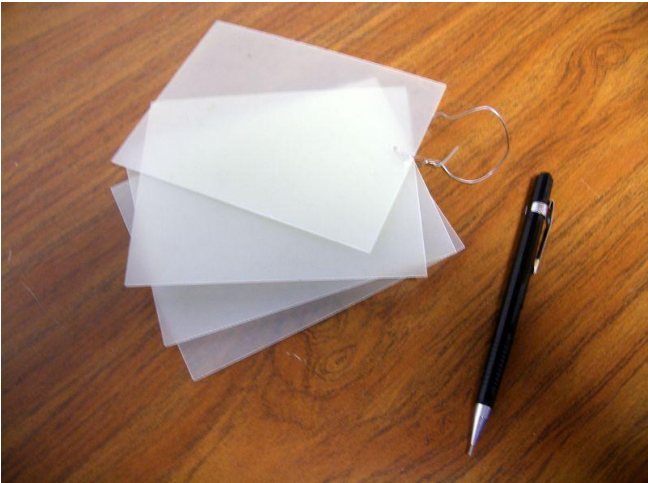
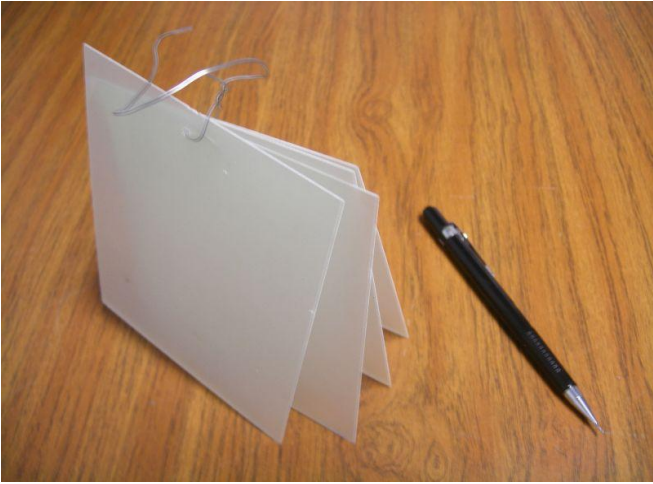
This sample was baked.

History of baked FR4 sample preparation:

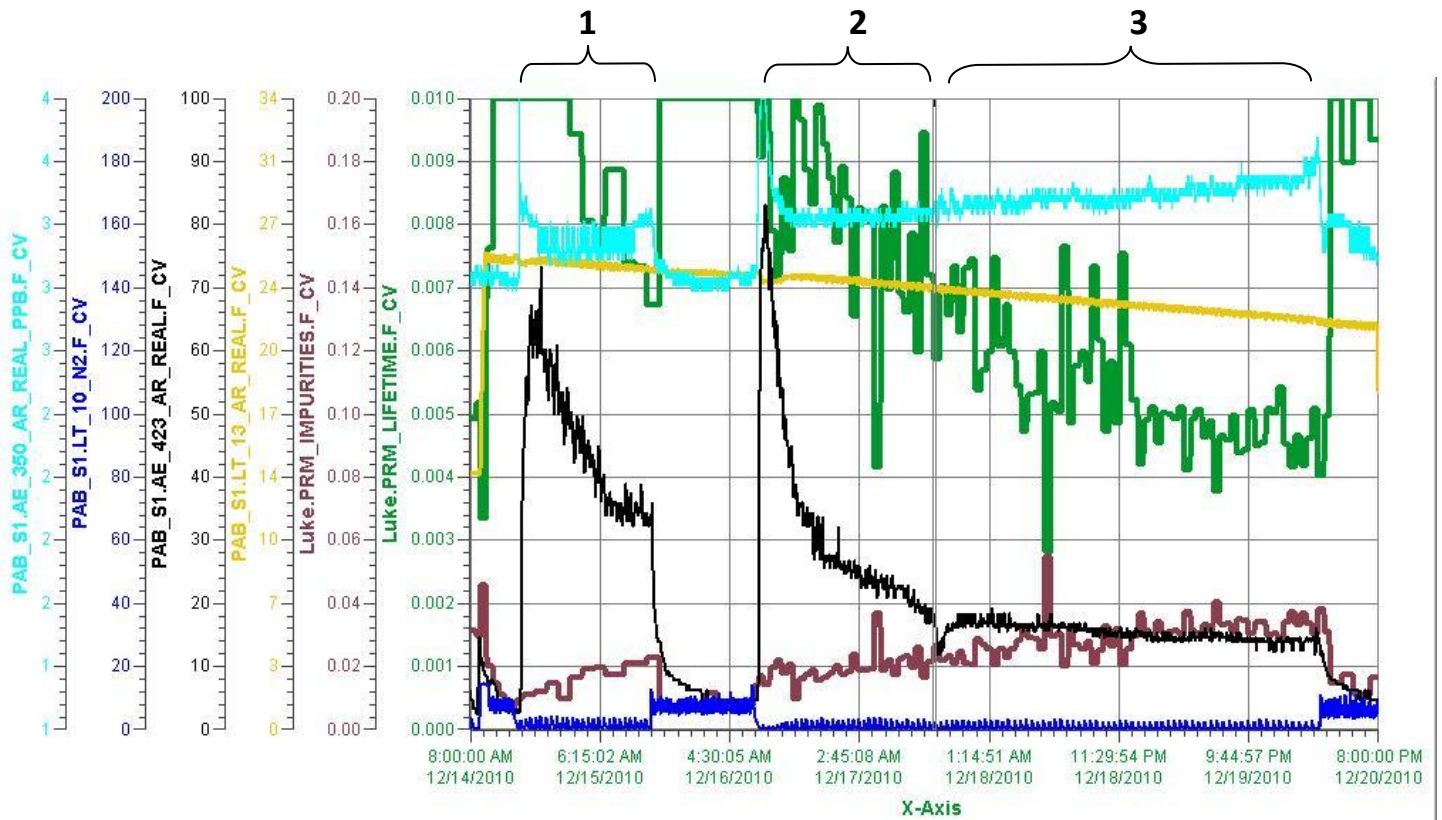
baked for 1 week in 50 C vacuum oven
 stayed in turned off oven for 1 week,
 baked in 50 C vacuum oven for few hours,
 moved to evacuated airlock and purged from the bottle for 44 hours,
 stayed in the airlock for 10 days without purging,
 purged for 24 h from the bottle and 1 h from Luke
 room temperature test started

<i>PAB Materials Test System</i>	
Date of Receipt	12/21/10 , logbook entry # 1451
Sample Name/Description	Baked FR4 , 4 plates
Sample	
Composition:	FR4 - glass reinforced epoxy laminate(woven fiberglass cloth with an epoxy resin)
Picture Location:	data base
Weight:	54 g
Dimensions/Area:	4 pieces 104 x 130 mm, total area: 0.11 m2
Source:	Stephen Pordes
Preparation:	cleaned - wiped, baked in 50C vacuum oven for 1 week + 1 day
Submerging in LAr or LH2	no
Time in the airlock(hrs)	
Purge:	24 h purged from the bottle and 1 h from Luke
Vacuum:	
Room Temperature	
Start Time/Date, End Time/Date :	12/14/10 3:33 pm, 12/15/10 3 pm
PrM run # :	10779
Condenser state:	on
Filter state:	off
O2 reading:	jumped by 0.4 ppb, then dropped to 0.2 ppb
H2O reading:	65 ppb in first 3 h, then dropped to 20-30 ppb
Lifetime:	7-10 ms
Liquid Test	
Start Time/Date, End Time/Date :	12/16/10 8:30 am, 12/17/10 3:40 pm
PrM run # :	10801

Condenser state:	on
Filter state/settings:	off
O2 reading:	jumped by 0.9 ppb, then dropped to 0.2-0.3 ppb
H2O reading:	80 ppb in 2 h, then dropped to 20-30 ppb
Temperature:	95 K
Lifetime:	6-9 ms
Liquid level	24 inches
Vapor Test	
Start Time/Date, End Time/Date :	12/17/10 3:40 pm, 12/20/10 3:45 pm
PrM run # :	10833
Condenser state:	on
Filter state/settings:	off
O2 reading:	increased by 0.2 ppb
H2O reading:	15 ppb
Temperature:	204-210 K
Lifetime:	5-6 ms
Liquid level	23.7-22 inches
Results/comments	



1. Room temperature test.
2. Liquid test.
3. Vapor test.



Pen Name	Description	Value	Eng Units	High Over Range	Low Over Range
— Luke.PRM_LIFETIME.F_CV	Luke.PRM_LIFETIME.F_CV	0.00687	sec	0.02785	0.00278
— Luke.PRM_IMPURITIES.F_...	Luke.PRM_IMPURITIES.F_CV	0.0218	Imps	0.0540	0.0054
— PAB_S1.LT_13.AR.REAL...	Luke Argon Level Probe	23.8	inches	25.6	13.8
— PAB_S1.AE_423.AR.REA...	HALO H2O meter (F_CV)	18.3	ppb	83.1	2.3
— PAB_S1.LT_10.N2.F_CV	Luke Condenser LN2 Level Pro...	-0.0	inches	14.5	-0.0
— PAB_S1.AE_350.AR.REA...	ppb version for plotting (F_CV)	3	ppb	4	3

12/14/2010 8:00:00 AM



12/20/2010 8:00:00 PM

