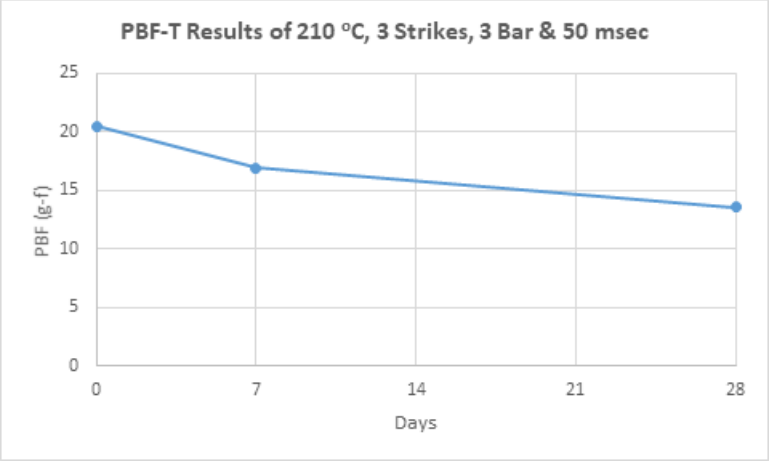
Materials Science Laboratory	AAEC
Confidential	**Job Number: 000001**

Report of Analysis

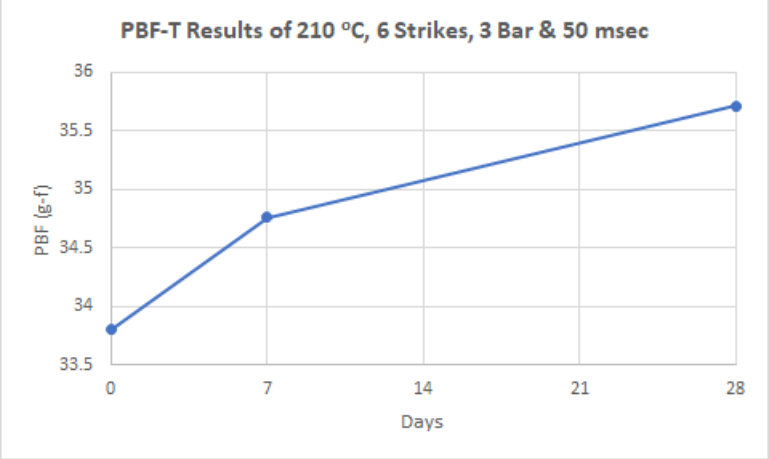
Date: 7/29/2021
Name of Materials: C-Material
Manufacturer: ADV-PH
Test Requested: Seal PBF-T under ambient condition
Test Requested by: Raymund Escalante
Objective: Confirm the compatibility of HUC cover-tape with the C-Material
Results:

HUC0054 on C-Material (IP4035-DC) Aging Data using Different Conditions for PBF-T: 3 Bar, 50msec			
Ambient @ 25º C/ 50 %RH		PBF in g-f	
Temp (Cº)	Days	Mean	SD
210 (3 Strikes)	0	20.48	5.94
	7	16.94	7.96
	28	13.57	8.58
210 (6 Strikes)	0	33.80	4.43
	7	34.76	4.33
	28	35.71	4.06
220 (3 Strikes)	0	22.56	5.94
	7	26.17	5.92
	28	26.27	6.66
220 (3 Strikes)	0	34.41	3.59
	7	35.76	3.37
	28	39.99	4.53

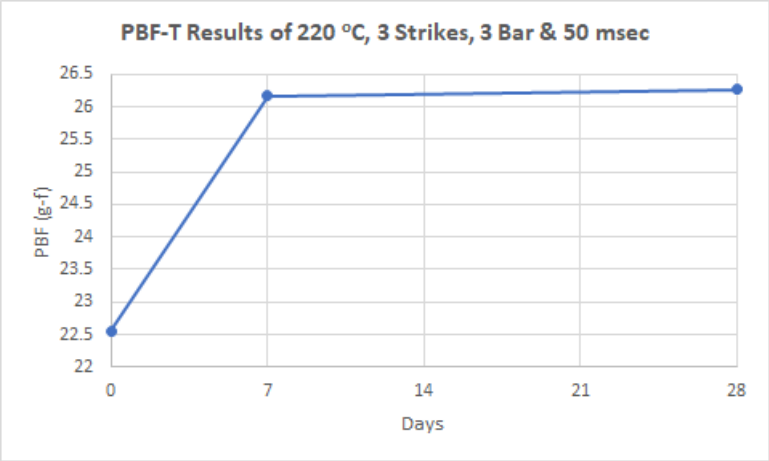
A.



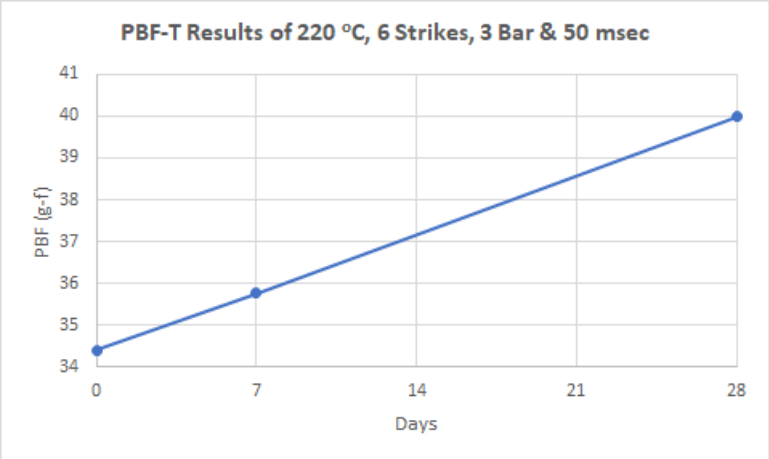
B.



C.



D.



Remarks:

The PBF-T results show compatibility between HUC, and C-material based on the sample inspection for open seal; There were no open seal observed between day zero (0), day seven (7) and day twenty-eight (28) seal test. A drop in PBF response for 210 ºC with three (3) strikes was observed. This is an indication that the cover tape's adhesive was not fully activated/bonded with the surface of the carrier tape. All samples that were sealed under the six (6) strikes condition produced an acceptable PBF response under the EIA standard.

It is recommended to use a sealing condition between 210 ºC -230 ºC as a sealing temperature with six (6) strikes to fully activate the adhesive component of the HUC cover-tape for C-Material.

***** Nothing Follow*****

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Tests Performed by:	**Chris Russel**	

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