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OPEN ARCHIVE of BENCHMARK DATA published in
***Carbon* (2016) <http://dx.doi.org/10.1016/j.carbon.2016.11.011>**

NanoRelease: Pilot interlaboratory comparison of a weathering protocol applied to resilient and labile polymers with and without embedded CNTs

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This archive organizes data folders in the following hierarchy:

1. By analysis lab (EPA, BASF, NRC)
2. By method (SEM, EDXS, TEM, ICPMS, UVVis, AUC, FFF)
3. By sample codes (which include aging lab, CNT content and position in aging chamber)

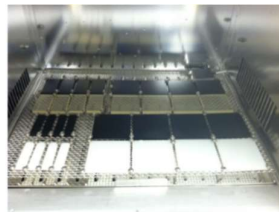
30 Specifically, the sample Coding / Numbering System is:

Aging Lab	Polymer matrix	CNT identifier – position identifier #	Analysis Type (wipe or leachate)	Example of Sample Number
I (BASF)	P - polyamide E - epoxy	0-1, 0-2, 0-3, 0-4 for leachate 0-5, 0-6, 0-7, 0-8 for wipe 4-1, 4-2, 4-3, 4-4 for leachate 4-5, 4-6, 4-7, 4-8 for wipe	W – wipe test sample L – leachate test sample	IE4-5W = Generated by BASF, 0.25% CNT epoxy, sample #5 (for wipe test at ERDC)
II	P - polyamide E - epoxy	0-1, 0-2, 0-3, 0-4 for leachate 0-5, 0-6, 0-7, 0-8 for wipe 4-1, 4-2, 4-3, 4-4 for leachate 4-5, 4-6, 4-7, 4-8 for wipe	W – wipe test sample L – leachate test sample	(no aging was performed, instead these specimens were used for various control measurements)
III (EPA – Ath)	P - polyamide E - epoxy	0-1, 0-2, 0-3, 0-4 for leachate 0-5, 0-6, 0-7, 0-8 for wipe 4-1, 4-2, 4-3, 4-4 for leachate 4-5, 4-6, 4-7, 4-8 for wipe	W – wipe test sample L – leachate test sample	IVP0-1L = Generated by EPA-Cin 0% CNT polyamide, sample #1 (for leachate test at BASF)
IV (EPA – Cin)	P - polyamide E - epoxy	0-1, 0-2, 0-3, 0-4 for leachate 0-5, 0-6, 0-7, 0-8 for wipe 4-1, 4-2, 4-3, 4-4 for leachate 4-5, 4-6, 4-7, 4-8 for wipe	W – wipe test sample L – leachate test sample	
V (LEITAT)	P - polyamide E - epoxy	0-1, 0-2, 0-3, 0-4 for leachate 0-5, 0-6, 0-7, 0-8 for wipe 4-1, 4-2, 4-3, 4-4 for leachate 4-5, 4-6, 4-7, 4-8 for wipe	W – wipe test sample L – leachate test sample	

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33 As described in the Supporting Information, the position identifier specifies the map of specimens
34 inside the SUNTEST XLS+ chamber



Row #	Line 6	Line 5	Line 4	Line 3	Line 2	Line 1		
	<i>REAR OF CHAMBER (less spray)</i>							
4	E4-7W	E4-8W	E4-5W	E4-6W	E4-4L	E4-3L	E4-2L	E4-1L
3	E0-7W	E0-8W	E0-5W	E0-6W	E0-4L	E0-3L	E0-2L	E0-1L
2	P4-7W	P4-8W	P4-5W	P4-6W	P4-4L	P4-3L	P4-2L	P4-1L
1	P0-7W	P0-8W	P0-5W	P0-6W	P0-4L	P0-3L	P0-2L	P0-1L
	<i>FRONT OF CHAMBER (more spray)</i>							

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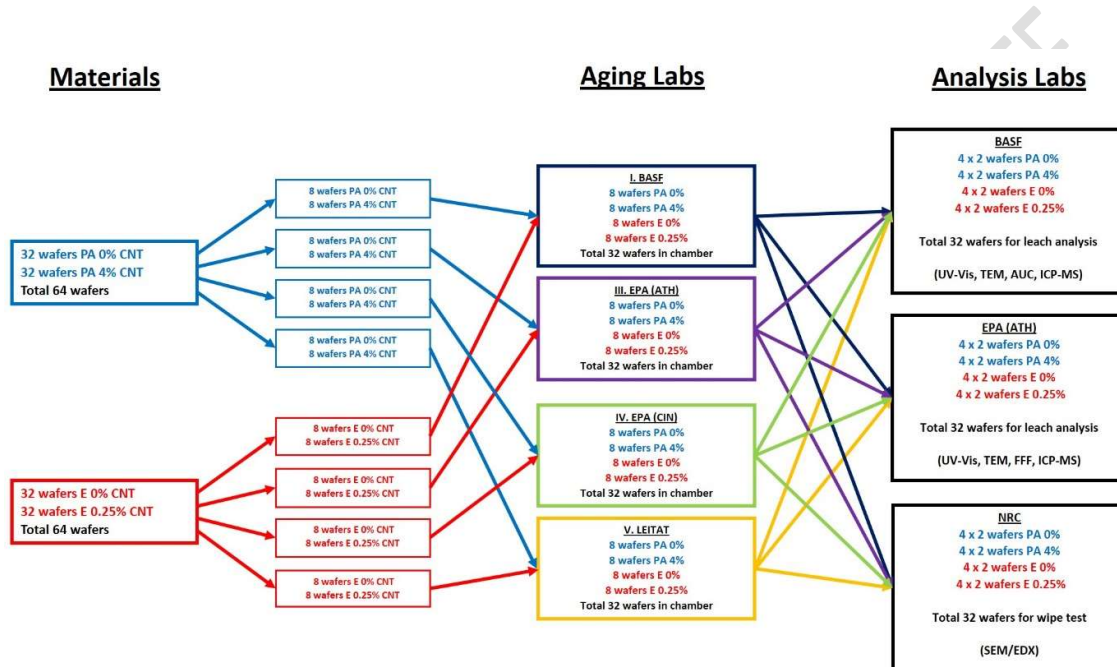
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38 The shipping and analysis is indicated by color code (which is applicable to the results in
 39 Figs. 4, 7, 8, to 9C, 9D), as is summarized by the logistical scheme below:

- 40 ● Samples 1 & 2 to BASF for leachate.
- 41 ● Samples 3 & 4 to EPA-Ath for leachate .
- 42 ● Samples 5 & 6 to ERDC for wipe test (not reported here)
- 43 ● Samples 7 & 8 to NRC for wipe test (only surface characterization reported here)

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DRAFT - DO NOT