

1 - RowKey: This is a combination of the sample number (ex: 'sa12345.00') and the Step (ex: 1, 2), combined and separated with a hyphen ('-'). The purpose of this column is to identify unique sample-step combinations, to place corresponding measurements between the three measurement types on the same row if they were taken on the same sample at the same step along the exposures.

2 - Sample: This is the standard SDLE 5+2 digit sample id (ex: 'sa12345.00')

3 - Material: This is the type of PET (Levels: HydStab = Hydrolytically Stabilized, UnStab = Unstabilized, UVStab = UV Stabilized)

4 - Thick: Sample thickness in centimeter

5 - Exposure: Which exposure types this particular sample was exposed to (Baseline, DampHeat, FreezeThaw, HotQUV, CyclicQUV)

6 - TotCycle: Total time in one cycle of exposure in minutes, i.e. one cycle in CyclicQUV exposure is 12 hrs / 720 min, which is 8hours / 480 min light plus 4hrs / 240 min dark. Exposures are either non-cyclic (all constant conditions) or cyclic with two states.

7 - S1Cycle: Time spent in cyclic state 1.

8 - S1T: Temperature in cyclic state 1.

9 - S1TRate: The rate of change in temperature from cyclic state 2 to cyclic state 1.

10 - S1H: Relative Humidity (%RH) in cyclic state 1.

11 - S1HRate: The rate of change in relative humidity from cyclic state 2 to cyclic state 1.

12 - S1I: Irradiance in cyclic state 1.

13 - S1IRate: The rate of change in irradiance from cyclic state 2 to cyclic state 1.

14 - S2T: Temperature in cyclic state 2.

15 - S2TRate: The rate of change in temperature from cyclic state 1 to cyclic state 2.

16 - S2H: Relative Humidity (%RH) in cyclic state 2.

17 - S2HRate: The rate of change in relative humidity from cyclic state 1 to cyclic state 2.

18 - S2I: Irradiance in cyclic state 2.

19 - S2IRate: The rate of change in irradiance from cyclic state 1 to cyclic state 2.

20 - Time: How much time the sample has spent being exposed (calculated from step, each step is 168 hours, or 1 week of time)

21 - Step: The current step along the series of exposures (ex: '0' = baseline, '1' = after first exposure step, '2' = after second exposure step)

22 - Irrad: What level of irradiance this sample was exposed to as a result of it's exposure type.

23 - PDose - The photodose the sample has accumulated - calculated by multiplying the total time exposed (Time) by the irradiance level (Irrad)

24 - L: A color value in LAB colorspace calculated from the HunterLab spectra (hunterlab spectra is not shown)

25 - a: A color value in LAB colorspace calculated from the HunterLab spectra (hunterlab spectra is not shown)

26 - b: A color value in LAB colorspace calculated from the HunterLab spectra (hunterlab spectra is not shown)

27 - YI: A color value calculated from the HunterLab spectra (hunterlab spectra is not shown)

28 - Haze: A spectral characteristic calculated from the HunterLab spectra (hunterlab spectra is not shown)

29 - abs300: First point in time data extracted from Cary-Abs spectra. This is a single value at a specific wavelength (300nm in this case).

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34 - abs400: Last point in time data extracted from Cary-Abs spectra. This is a single value at a specific wavelength (400nm in this case).

35 - iad300: First point in time data extracted from Cary-Abs-IAD spectra. This is a single value at a specific wavelength (300nm in this case).

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40 - iad400: Last point in time data extracted from Cary-Abs-IAD spectra. This is a single value at a specific wavelength (400nm in this case).

41 - ftir1716: First point in time data extracted from FTIR spectra. This is a single value at a specific wavenumber (1716 cm^{-1} in this case).

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48 - ftir714: Last point in time data extracted from FTIR spectra. This is a single value at a specific wavenumber (1716 cm^{-1} in this case).

49 - ftir1716/ftir1410: Ratio of the first FTIR point in time data to some reference FTIR point in time data. This is a single ratio value taken at a specific wavenumber to a reference wavenumber. (ratio of point at 1716 cm^{-1} to the point at 1410 cm^{-1} in this case).

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56 - ftir714/ftir1410: Ratio of the last FTIR point in time data to some reference FTIR point in time data. This is a single ratio value taken at a specific wavenumber to a reference wavenumber. (ratio of point at 714 cm^{-1} to the point at 1410 cm^{-1} in this case).

57 - carywv900 - The first UV spectra value ('carywv' is a tag that designates this column is part of the uv spectra, the number portion of the column name is the 'wavelength' of the spectra in nm, which is the X axis, the values in this column are 'abs' or absorbance at that particular wavelength)

58 - carywv899.5 - The second UV spectra value

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1496 - carywv180.5: The second to last UV spectra value

1497 - carywv180: The last UV spectra value

1498 - carywviad900: The first IAD (induced absorbance to dose) spectra value ('carywviad' is a tag that designates this column is part of the IAD spectra, the number portion of the column name is the 'wavelength' of the spectra in nm, which is the X axis, the values in this column are 'abs to dose' or absorbance to dose at that particular wavelength)...IAD spectra is calculated from Abs spectra from successive dose steps, i.e. IAD at step 1 is the difference in abs from step1 to step0 which is then divided by the difference in Pdose (23rd column) from step1 to step0, and such for other steps. Since light (Pdose) is only available in HotQUV and CyclicQUV exposures IAD is hence available for this two exposures.

1499 - carywviad899.5 - The second IAD spectra value

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2937 - carywviad180.5: The second to last IAD spectra value

2938 - carywviad180: The last IAD spectra value

2939 - ftirwv650.431 - The first IR spectra value ('ftirwv' is a tag that designates this column is part of the ir spectra, the number portion of the column name is the 'wavenumber' of the spectra in cm^{-1} , which is the X axis, the values in this column are 'abs' or absorbance at that particular wavenumber)

2940 - irwv651.363 - The second IR spectra value

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6533 - irwv3999.5 - The second to last IR spectra value

6534 - irvv4000.43 - The last IR spectra value