Electronic Supporting Information

Terephthalate as a probe for photochemically generated hydroxyl radical

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pKₐ Determination for hTPA

To determine the pKₐ values for hTPA, small aliquots of hydrochloric acid were added to a hTPA solution, and the pH change versus volume added was plotted. The overall volume change was less than 2% at the end point.

The pH of the system changes the UV-visible absorption spectrum of hTPA, which will affect the photochemistry of the compound. The pKₐ values of hTPA were 3.62, 6.47, and 9.86 as determined from the titration shown in Figure S1.

Figure S1. Titration curve for hydroxyterephthalate. The inset is an expansion of the region of interest around the three pKₐ values.