## **Supporting Information**

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**Figure S1.** FTIR spectra of the polyesters obtained through the synthesis of fluorinated compounds, **a**) DMTFS, **b**) DMHFG, **c**) DMOFA, and ethylene glycol, with CALB as catalysts, under the optimal conditions (1h US followed by 6h vacuum at 40 °C).



**Figure S2.** Time of water drop absorption of cotton samples coated with poly(ethylene tetrafluorosuccinate); the coating was performed by placing the cotton samples in the same container as the initial reactants and let the reaction to proceed (water bath; 6h, 40 °C).

	Wavenumber (cm <sup>-1</sup> )					
	O-H stretching	C-H stretching	C=O stretching (ester)	C-H bending	C–F stretching	C-O stretching
Ethylene glycol	3355	2947, 2881	-	1411, 1330	-	1087, 1045
DMTFS	-	2968, 2861	1784	1444, 1328	1178, 1143	1101, 1004
DMHFG	-	2969, 2861	1785	1444, 1327	1185, 1143	1052
DMOFA	-	2969, 2860	1784	1444, 1325	1197 <i>,</i> 1145	1077, 1024
Poly(ethylene tetrafluorosuccinate)	3236	2968	1783	1481, 1323	1181	1099
Poly(ethylene hexafluoroglutarate)	3363	2970	1710	1482, 1328	1145	1053
Poly(ethylene octafluoroadipate)	3328	2951	1780	1428, 1310	1190	1020

 Table S1. Infrared absorption assignments of the synthesized fluorinated polyesters