

Figure S1. ^1H NMR spectra of (A) (top) and BEPFB (bottom) (DMSO-d_6 , 20°C , 400 MHz)

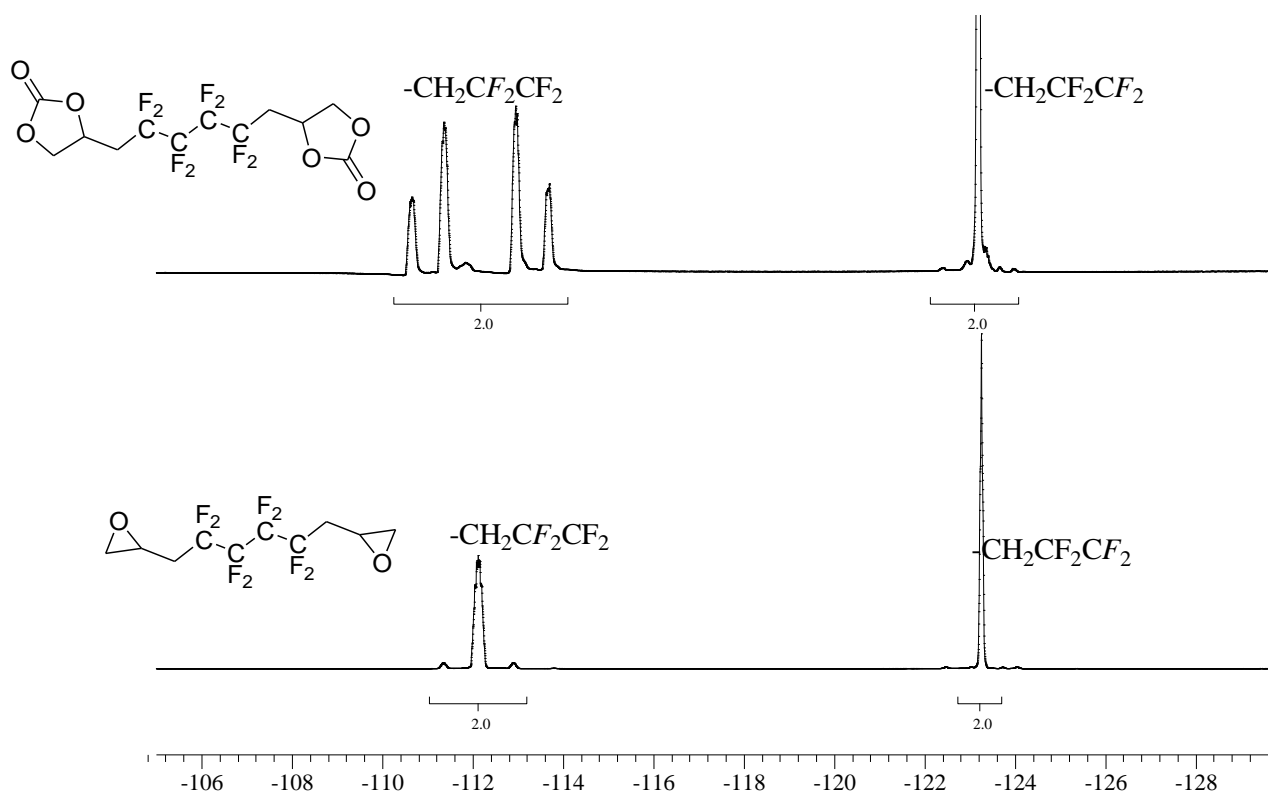


Figure S2. ^{19}F NMR spectra of (**A**) (top) and BEPFB (bottom) (DMSO-d_6 , 20°C , 235.2 MHz)

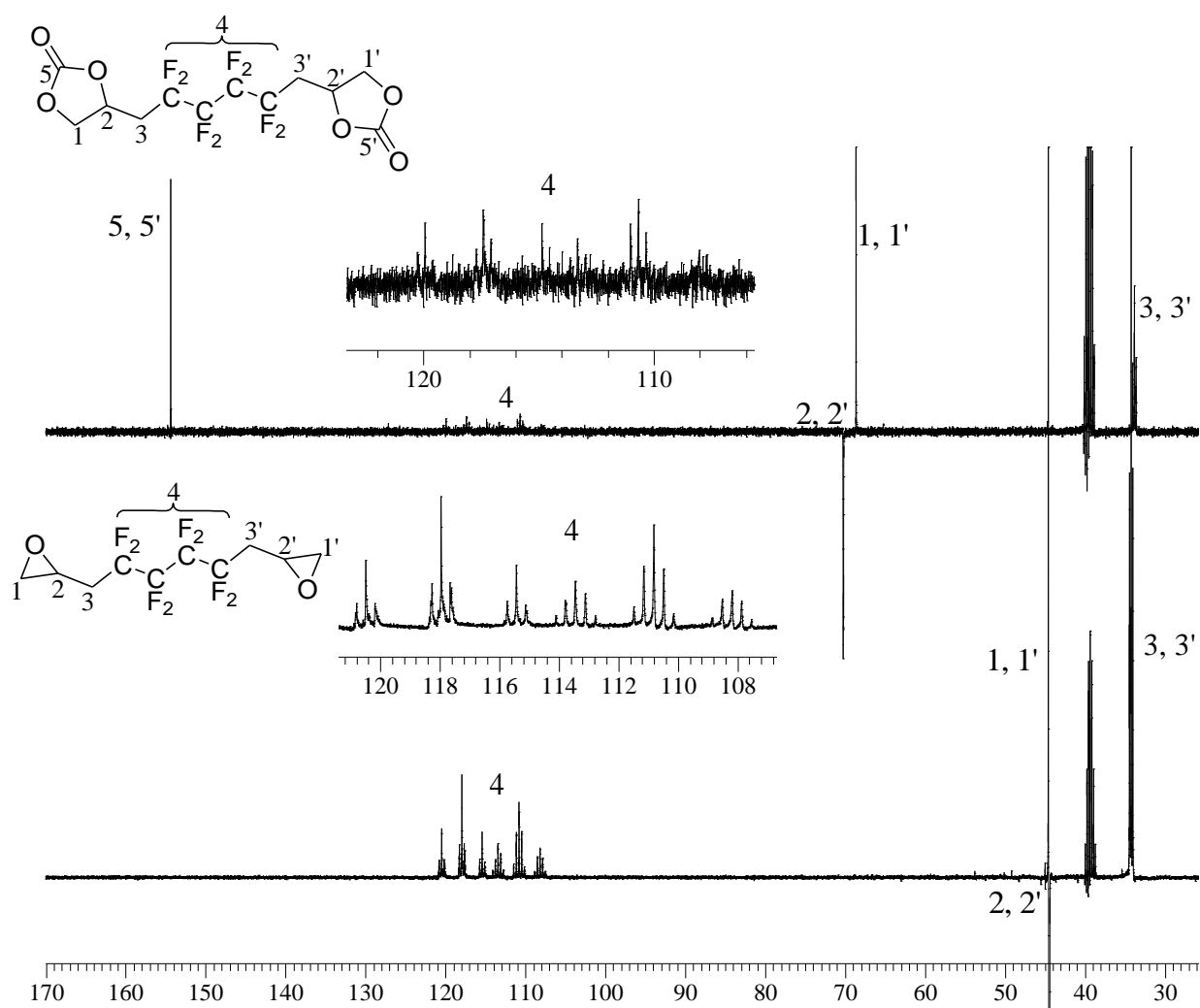


Figure S3. ^{13}C NMR (DEPT 135) spectra of (**A**) (top) and BEPFB (bottom) (DMSO, 20 °C, 100.6 MHz)

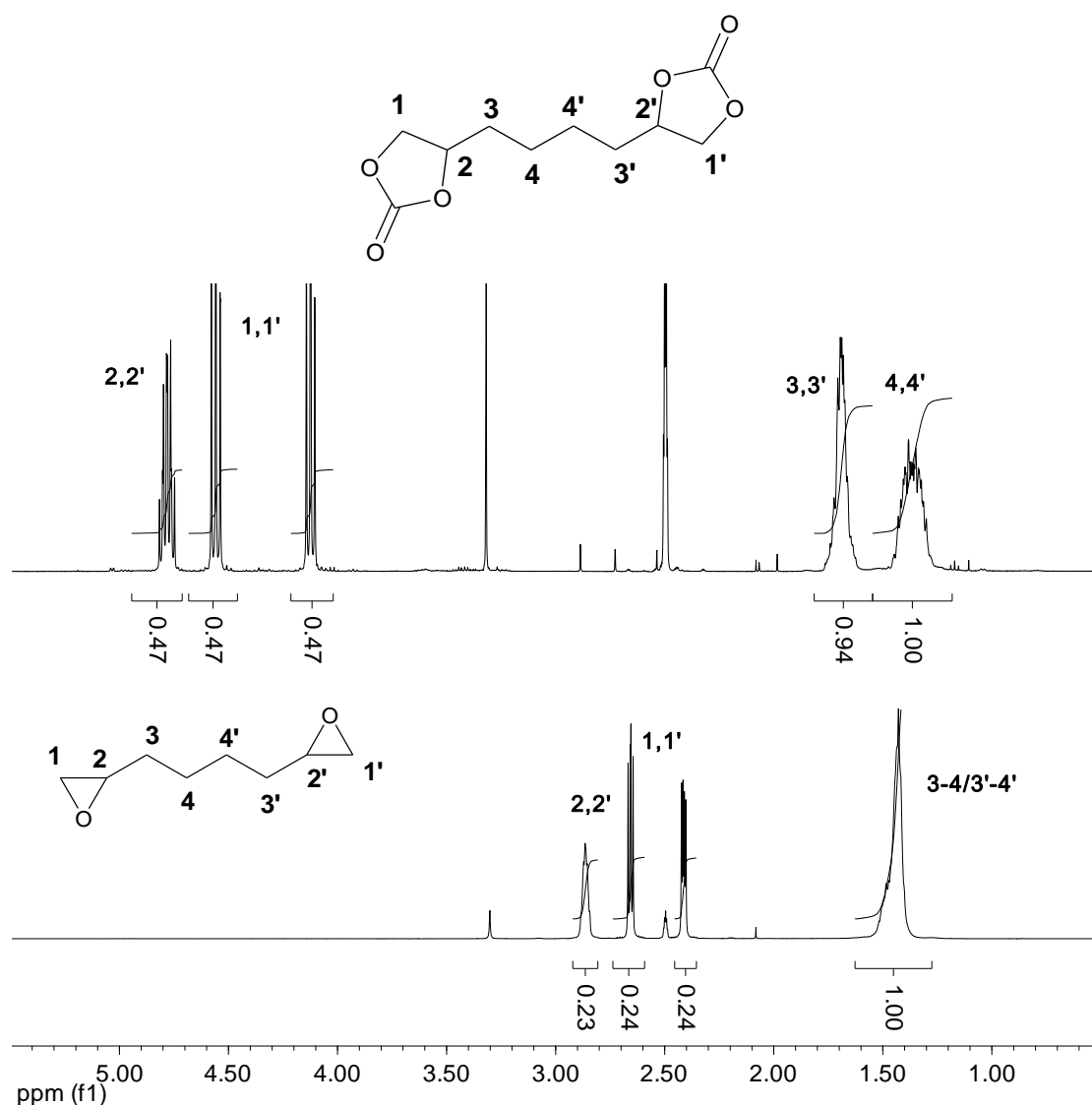


Figure S4. ^1H NMR spectrum of (**B**) (top) and 1,2,7,8-diepoxyoctane (bottom) (DMSO-d_6 , 20°C , 400 MHz)

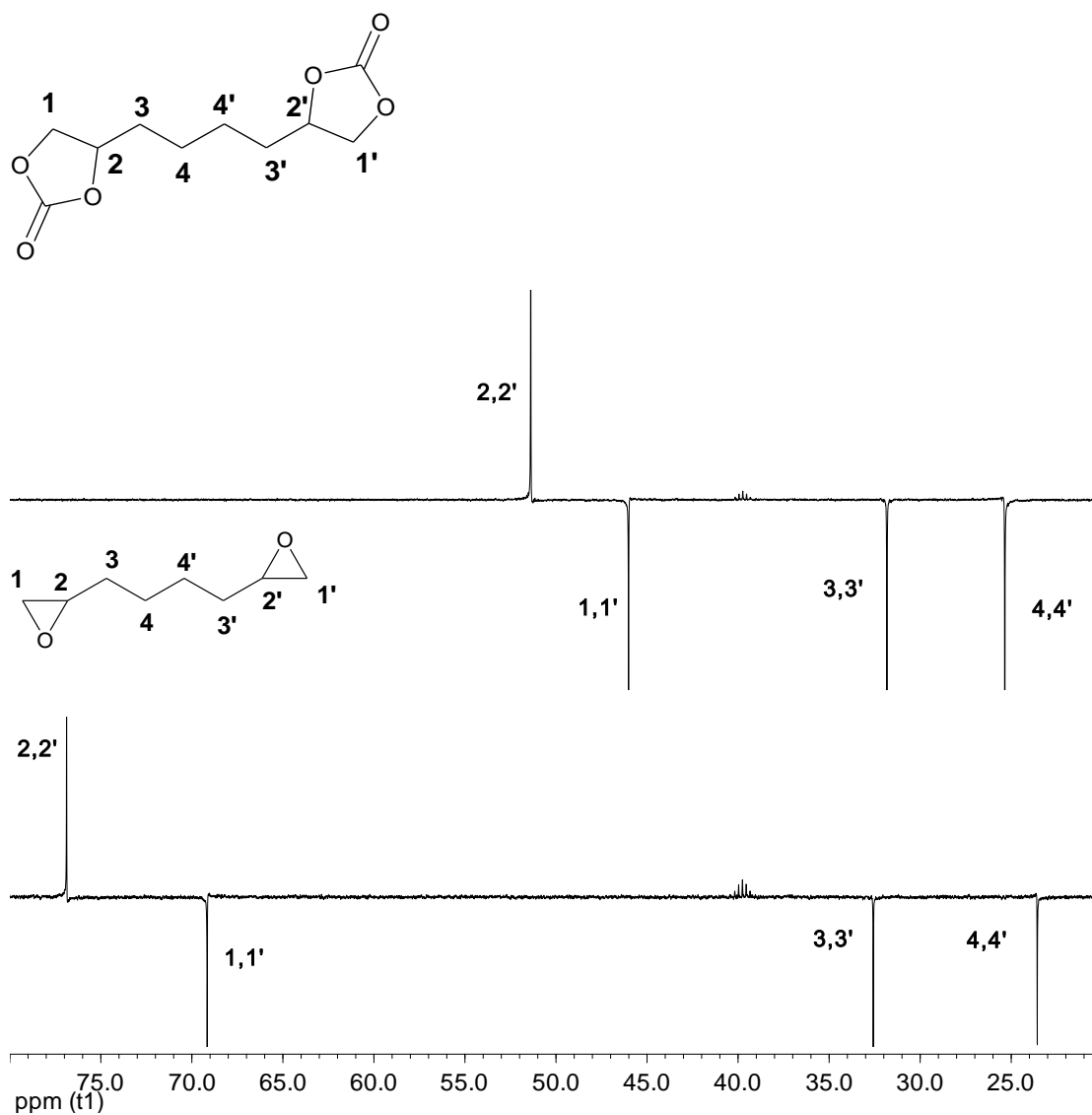


Figure S5. ^{13}C NMR (DEPT 135) spectrum of (**B**) (top) and 1,2,7,8-diepoxyoctane (bottom) (DMSO, 20 °C, 100.6 MHz)

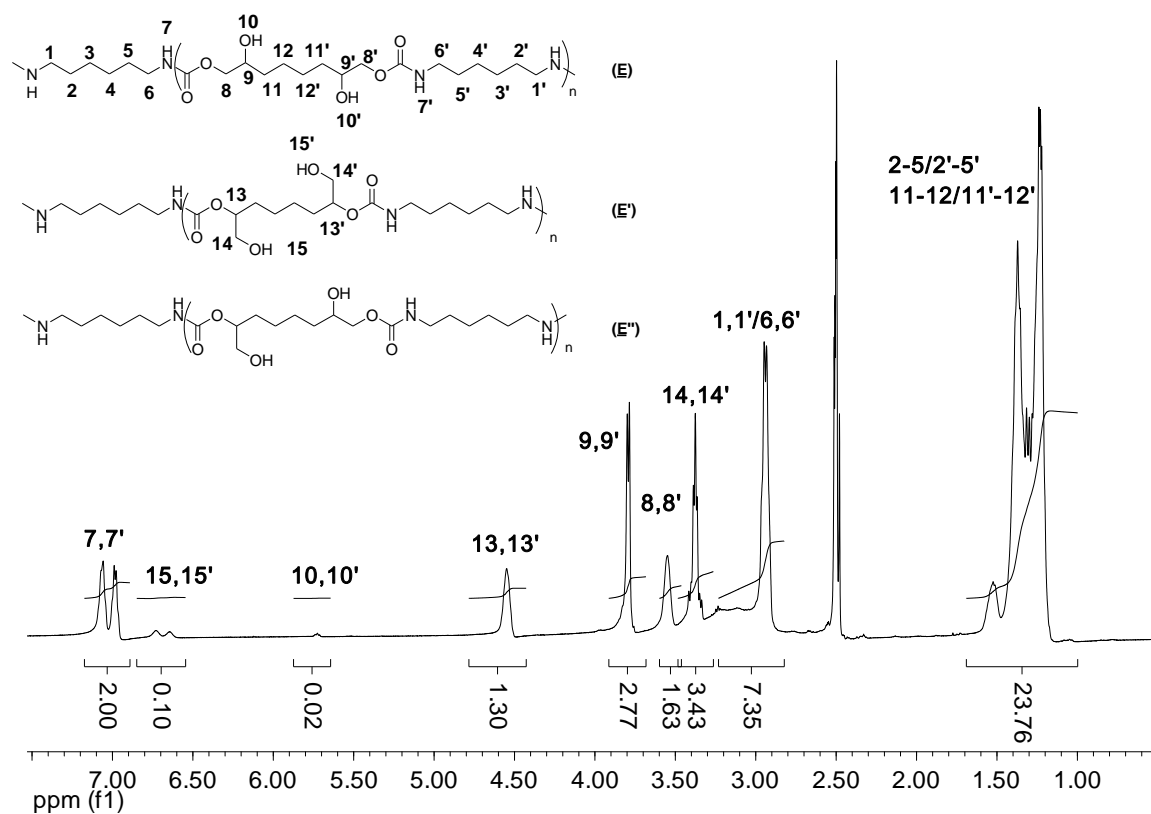


Figure S6. ^1H NMR spectrum of the synthesized PHUs (DMSO-d_6 , 20°C , 400 MHz)

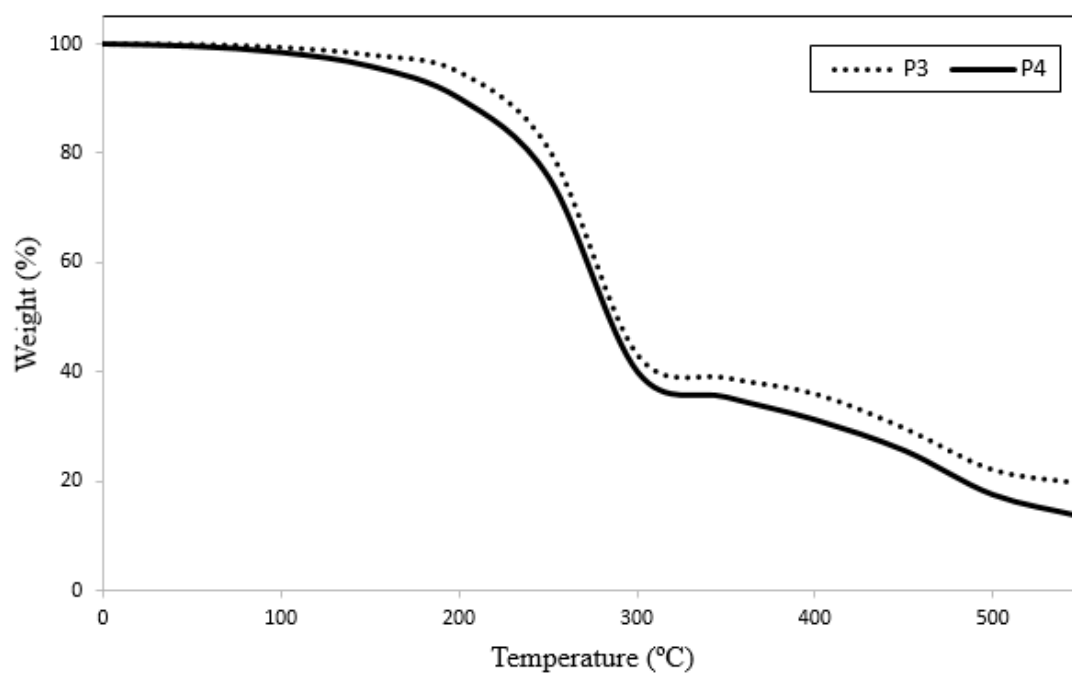


Figure S7. TGA thermograms of **P3** and **P4**