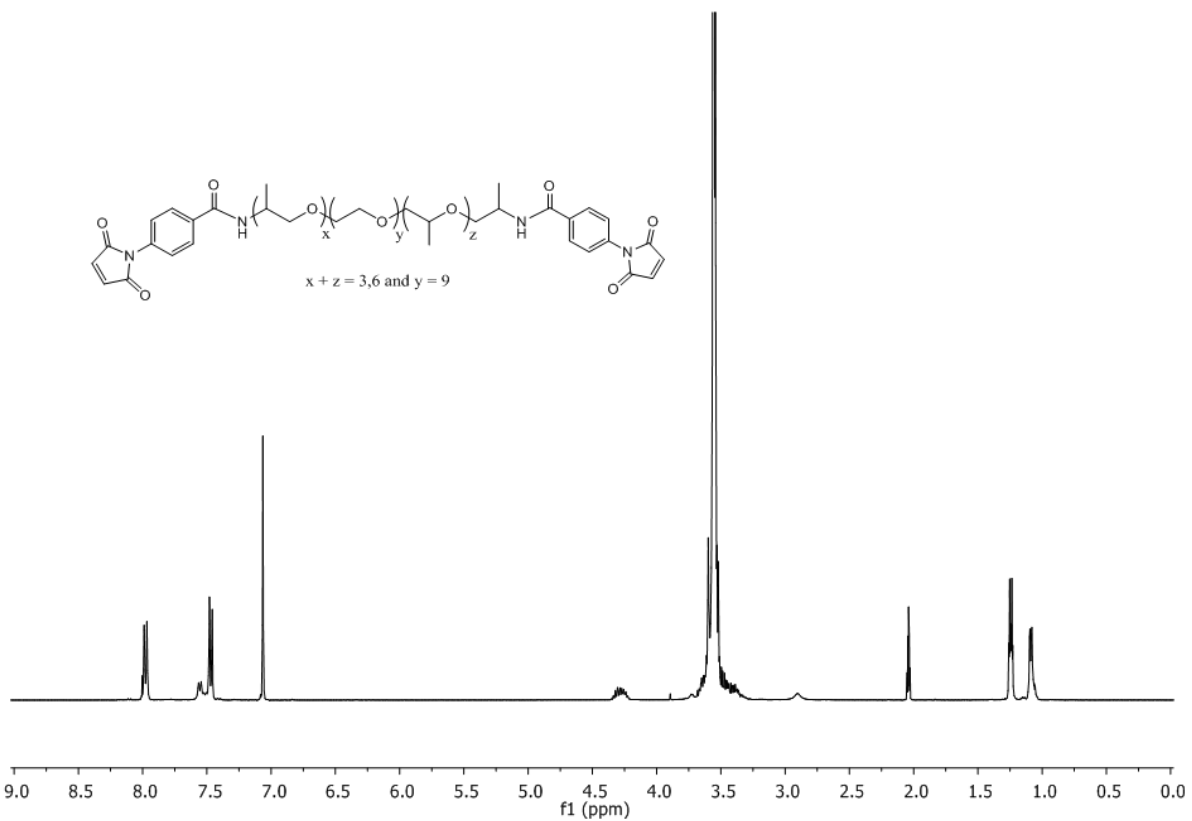
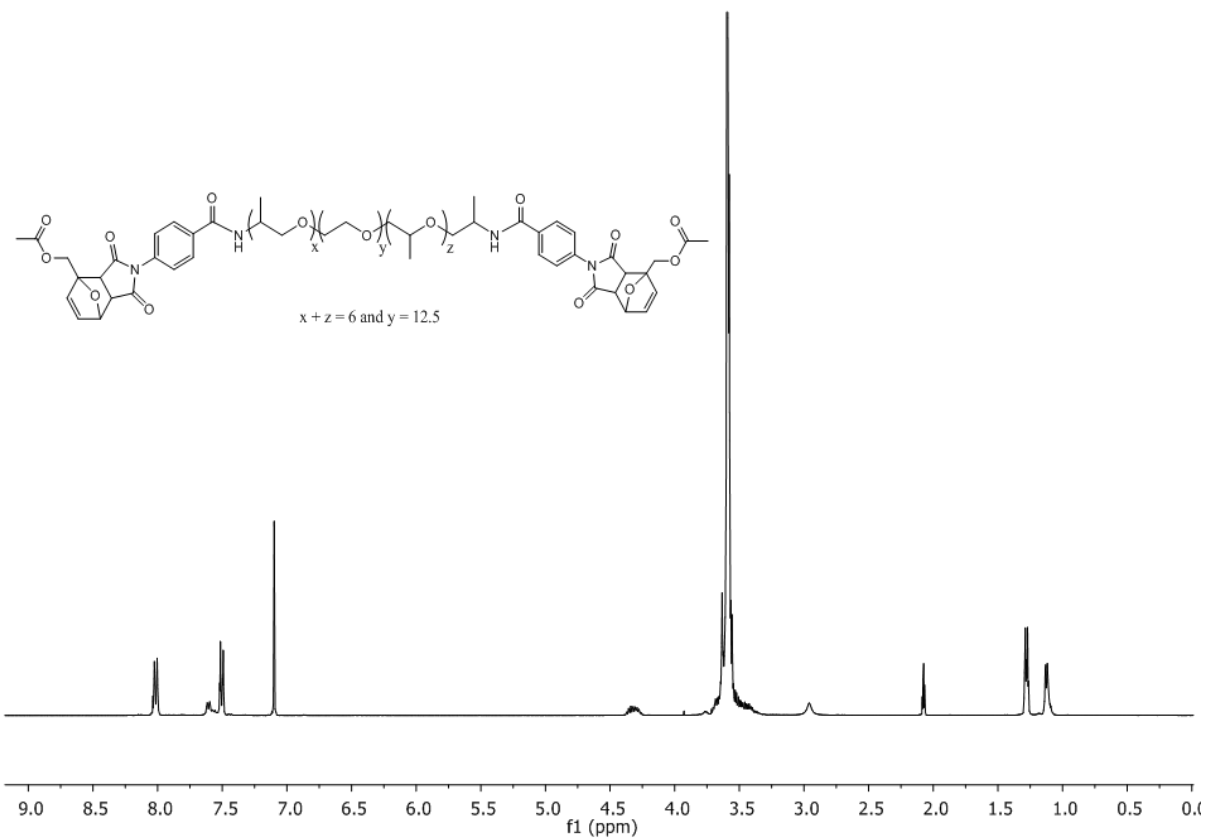


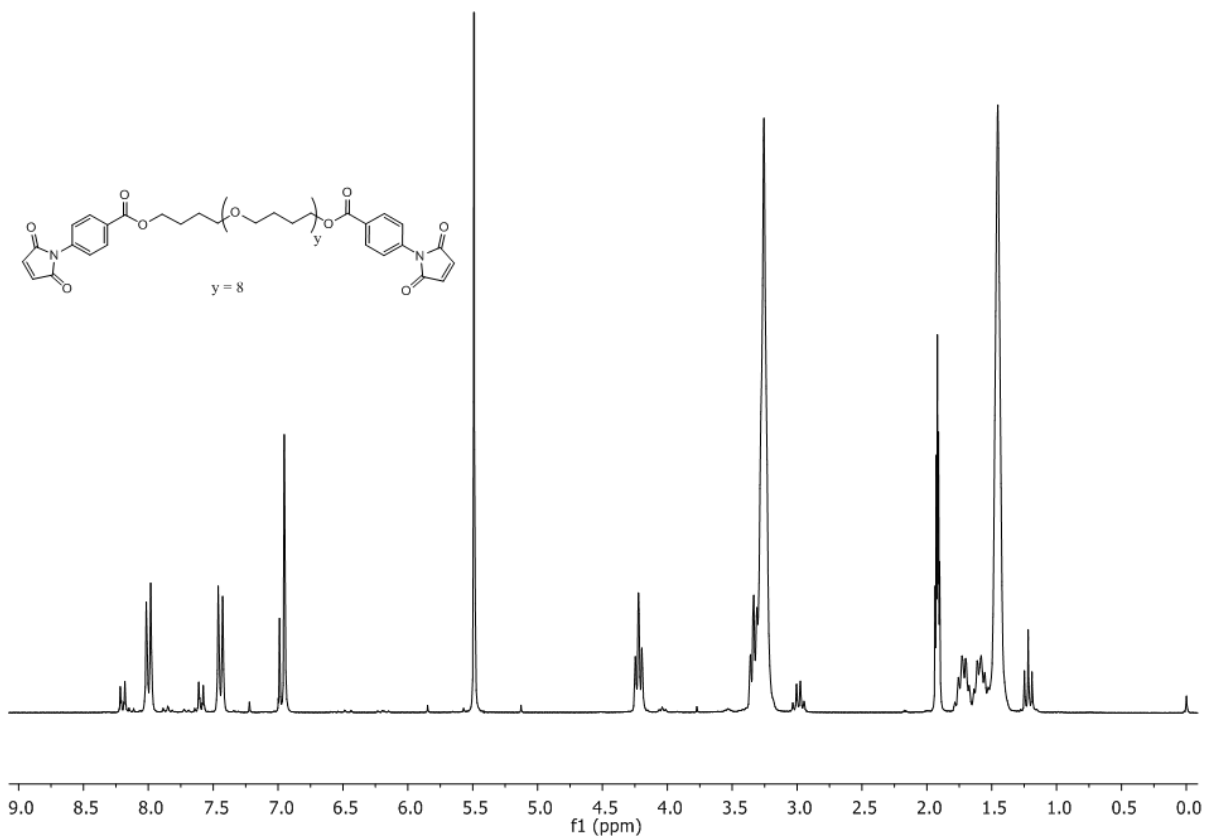
**SI 1**  $^1\text{H NMR}$  spectrum of aromatic maleimides BM Ar L35 (400MHz,  $(\text{CD}_3)_2\text{CO}$ )



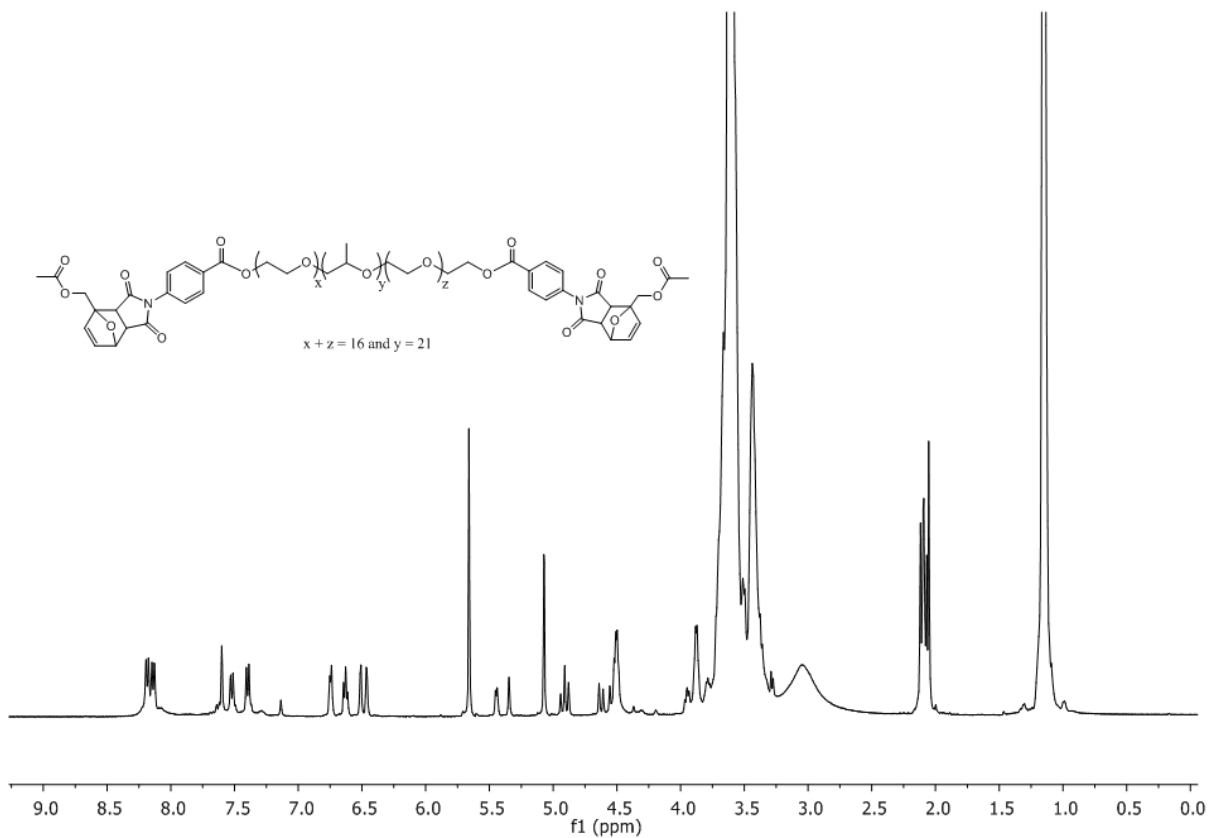
SI 2 <sup>1</sup>H NMR spectrum of aromatic maleimides BM Ar ED 600 (400MHz, (CD<sub>3</sub>)<sub>2</sub>CO)



SI 3 <sup>1</sup>H NMR spectrum of aromatic maleimides BM Ar ED 900 (400MHz, (CD<sub>3</sub>)<sub>2</sub>CO)



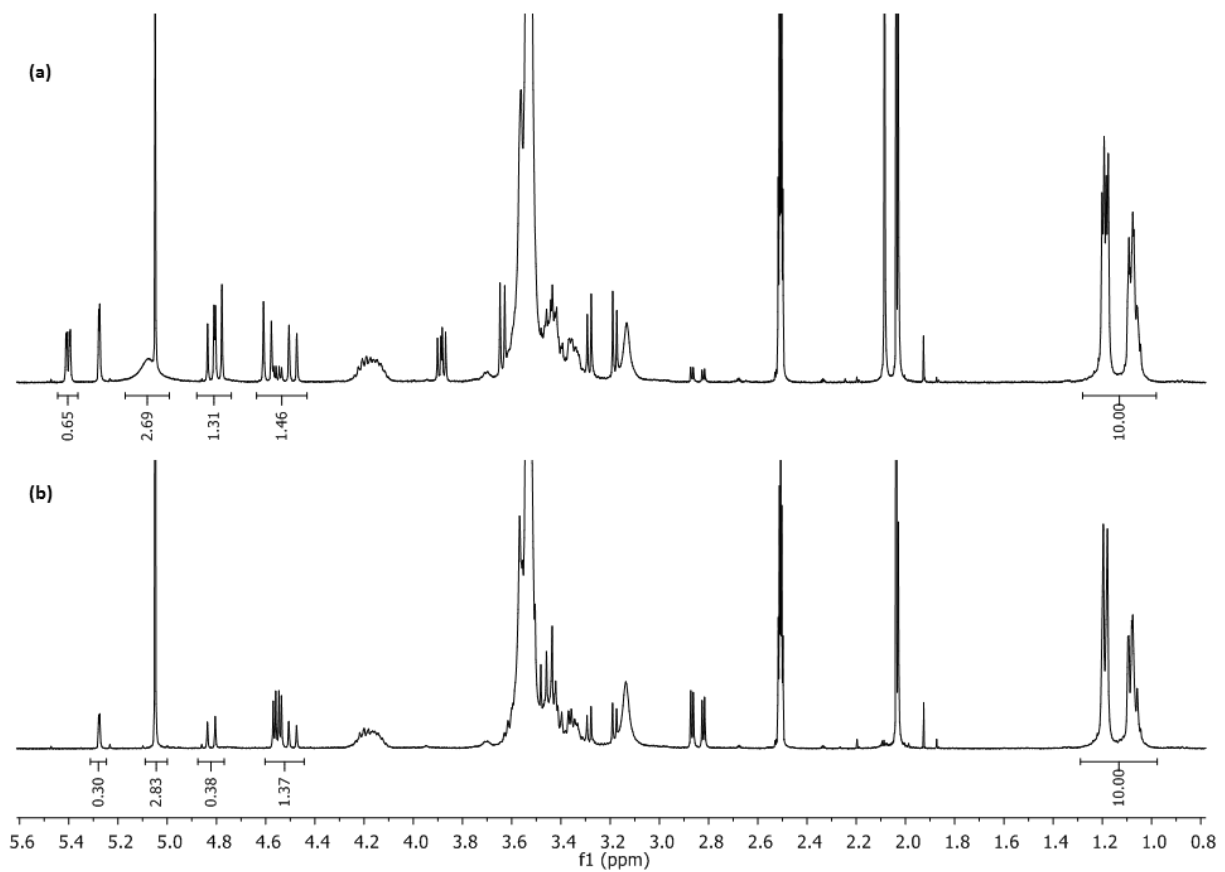
SI 4  $^1\text{H NMR}$  spectrum of aromatic maleimides BM Ar Terat650 (400MHz,  $(\text{CD}_3)_2\text{CO}$ )



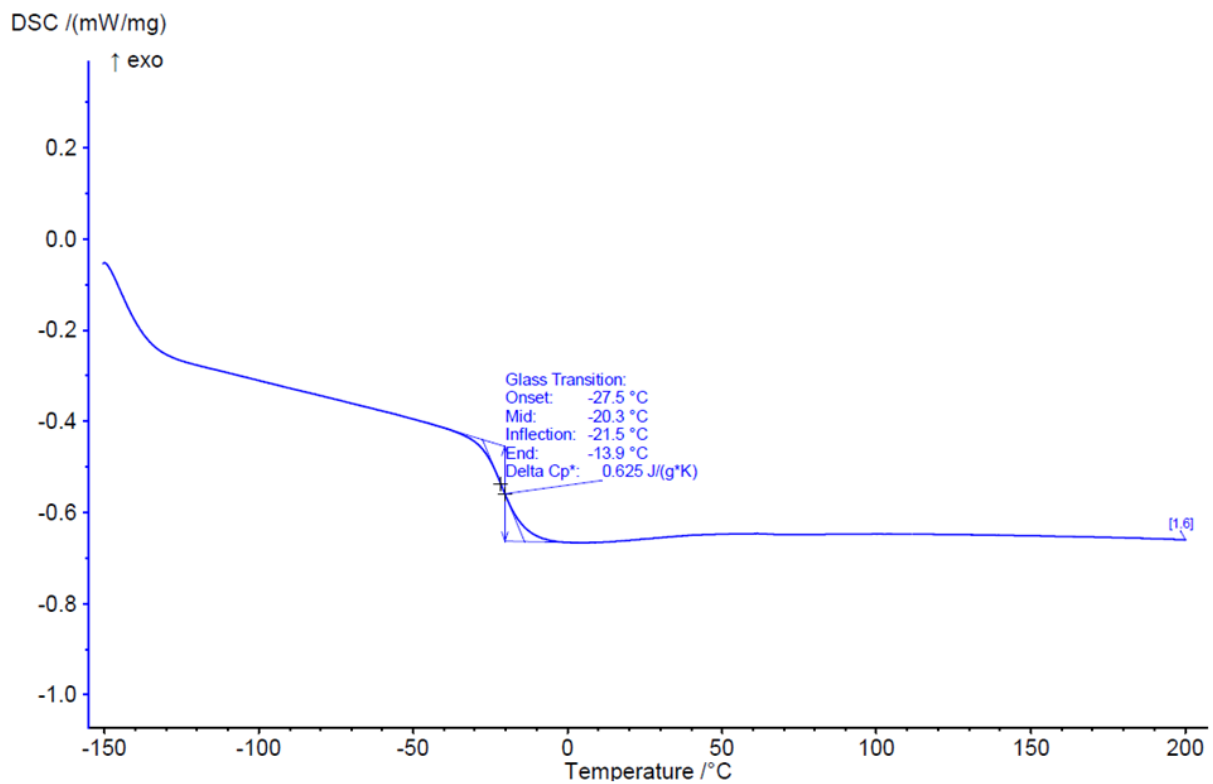
SI 5  $^1\text{H NMR}$  spectrum of aromatic maleimides blocked furfuryl acetate BM Ar L35 BLQ Furfuryl Acetate (400MHz,  $(\text{CD}_3)_2\text{CO}$ )



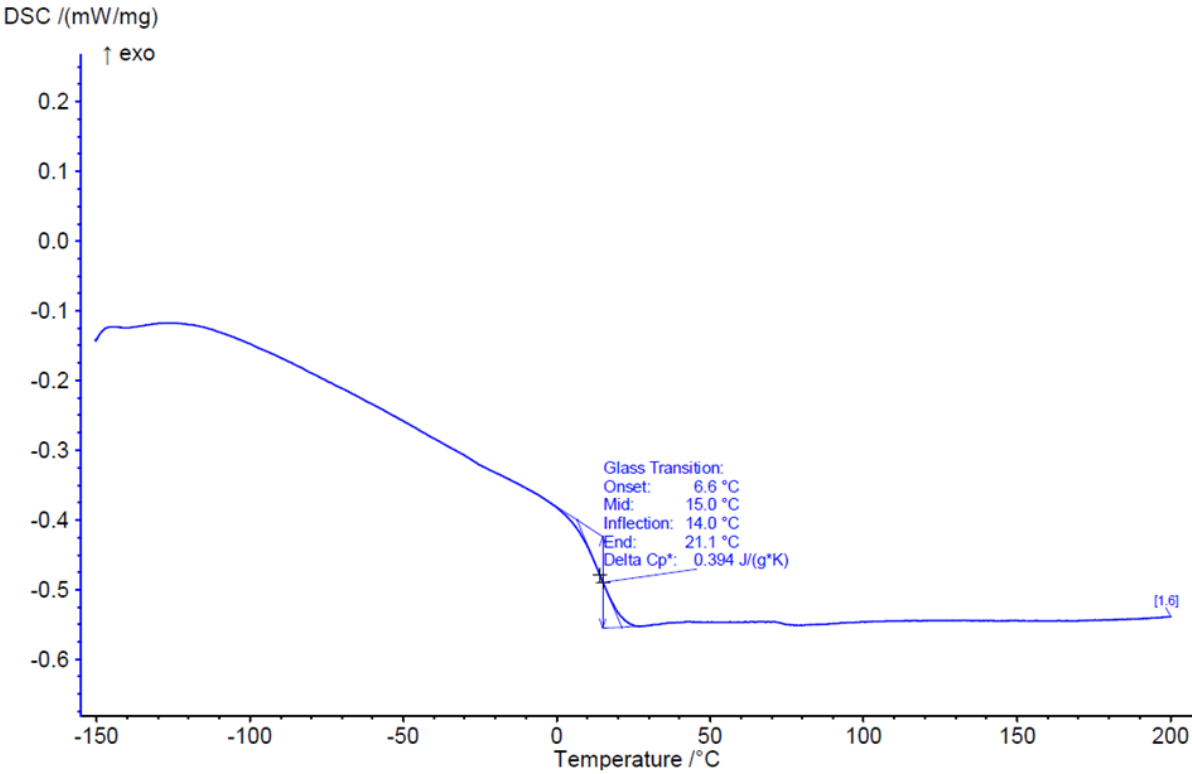




SI 10  $^1\text{H}$  NMR spectra of BMIAr BLQ F1+ thiophénoL 70°C at 0 min (a) and BMIAl BLQ F1+ thiophénoL 70°C at 200 min (b) (400MHz,  $(\text{CD}_3)_2\text{CO}$ )



SI 11 DSC thermogram of polymer BMI-Al + 2-MEE



SI 12 DSC thermogram of polymer BMI-Ar + 2-MEE