Electronic Supplementary Material (ESI) for Polymer Chemistry.

Supporting Information to

Epoxidized 1,4-polymyrcene

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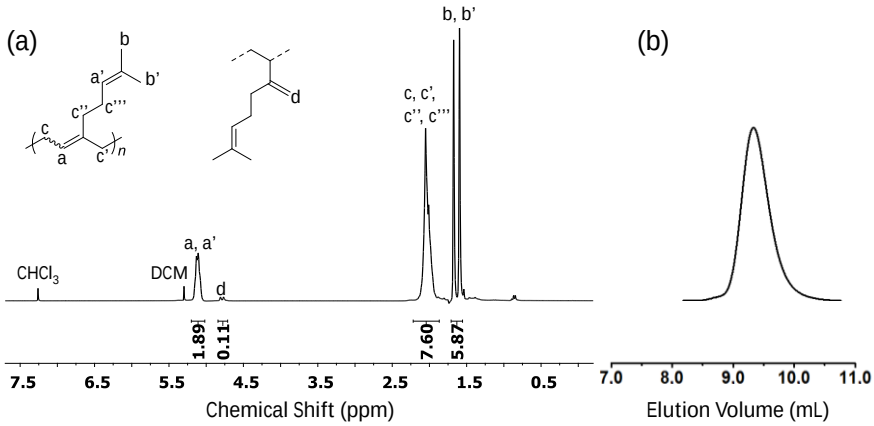

Figure S1. (a) ^{1}H NMR (500 MHz, $CDCl_3$) spectrum and (b) SEC-RI trace (eluent: THF) of the 1,4-polymyrcene sample synthesized by anionic polymerization.

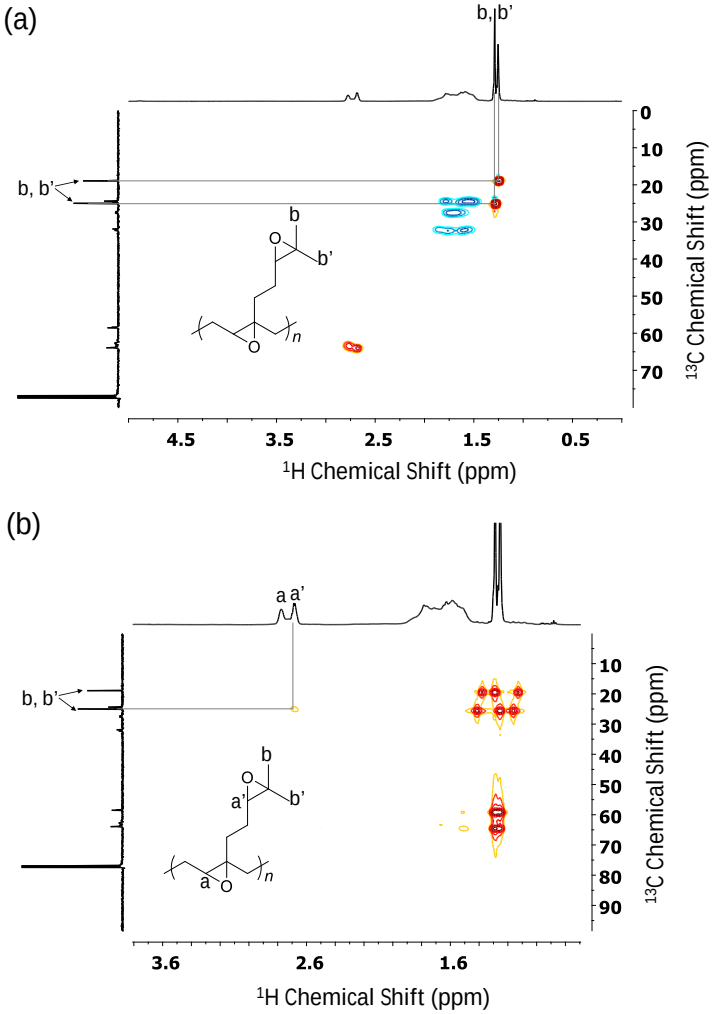

Figure S2. (a) ^{1}H,^{13}C-HSQC NMR (500 MHz, 125 MHz) spectrum and (b) ^{1}H,^{13}C-HMBC (500 MHz, 125 MHz) spectrum of the 98% epoxidized 1,4-polymyrcene in $CDCl_3$.

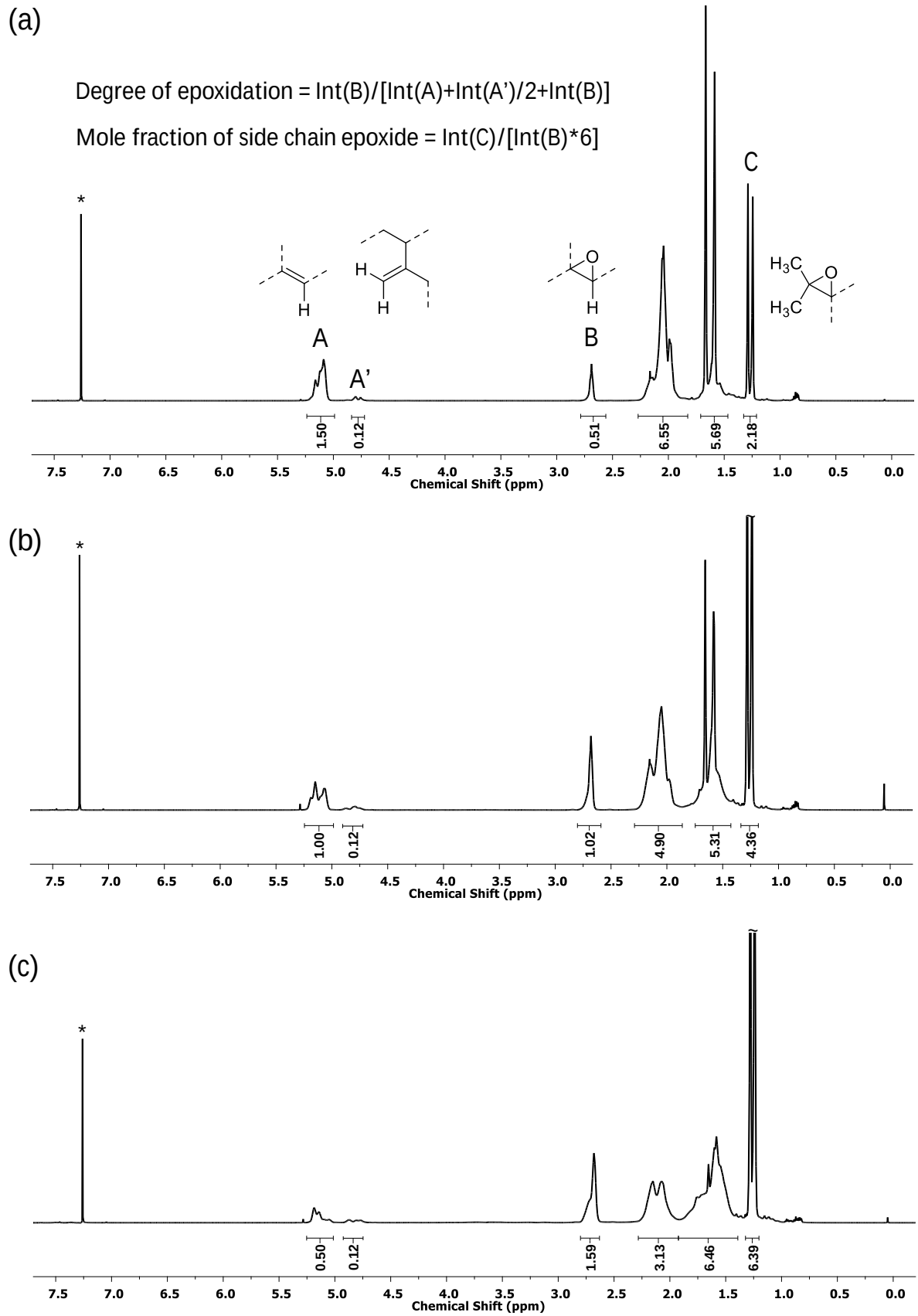

Figure S3 ^{1}H NMR spectra (500 MHz, $CDCl_3$) of the partially epoxidized 1,4-polymyrcenes (a) 25%, (b) 49%, and (c) 74% (* = solvent).

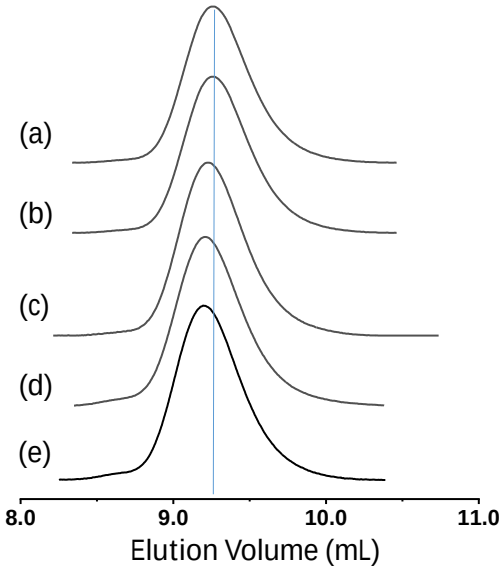

Figure S4. SEC-RI traces (eluent: THF) of (a) 1,4-polymyrcene and epoxidized 1,4-polymyrcenes (b) 25%, (c) 49%, (d) 74%, and (e) 98%.

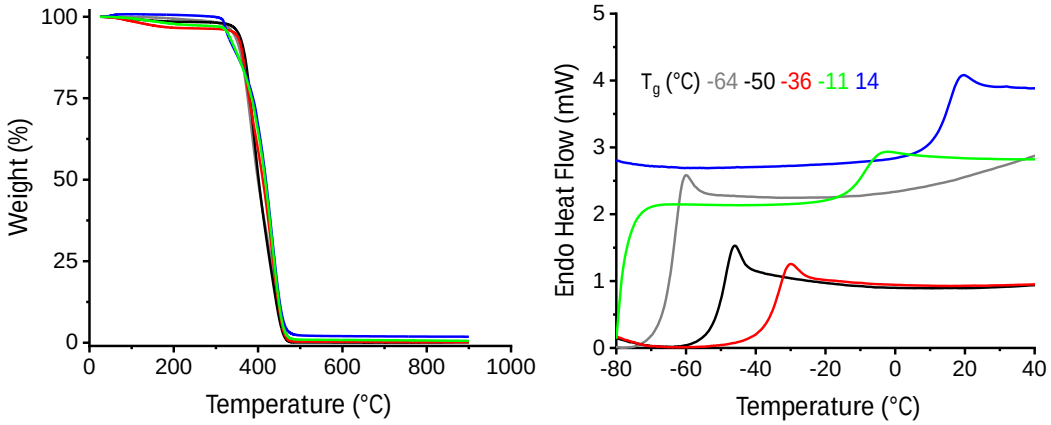

Figure S5. TGA curves (10 K min^{-1}, N_2) (left) and DSC 2nd heating curves (10 K min^{-1}, N_2) (right) of 1,4-polymyrcene (grey) and epoxidized 1,4-polymyrcenes 25% (black), 49% (red), 74% (green), and 98% (blue).

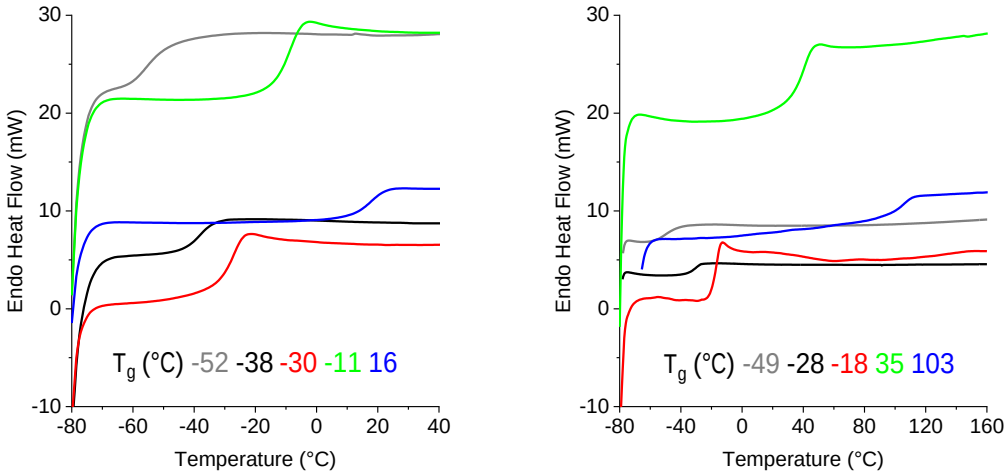

Figure S6. DSC 1st heating curves (10 K min^{-1}, N_2) of 1,4-polymyrcene (grey) and epoxidized 1,4-polymyrcenes 25% (black), 49% (red), 74% (green), and 98% (blue) after storage for ~10 months at -20 °C (left) and after annealing at 260 °C for 30 min (right).

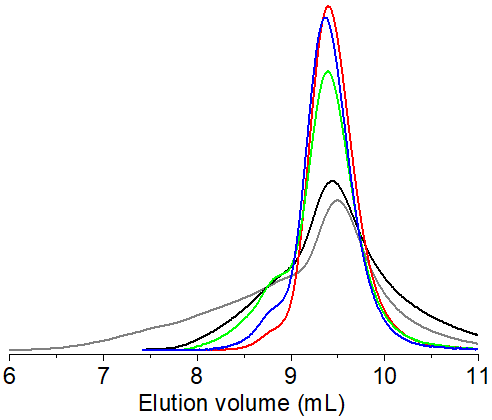

Figure S7. SEC-RI traces (eluent: THF) of 1,4-polymyrcene (grey) and epoxidized 1,4-polymyrcenes 25% (black), 49% (red), 74% (green), and 98% (blue) after storage for ~10 months at -20 °C.