

Supporting Information

Fabrication of Dynamically Cross-Linked Polyethylene with Boronate Ester Bonds via Thiol-Ene Click Reaction: Thermal Stability and Reprocessability

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The PDF file includes:

Figs. S1 to S11

Supporting Figures

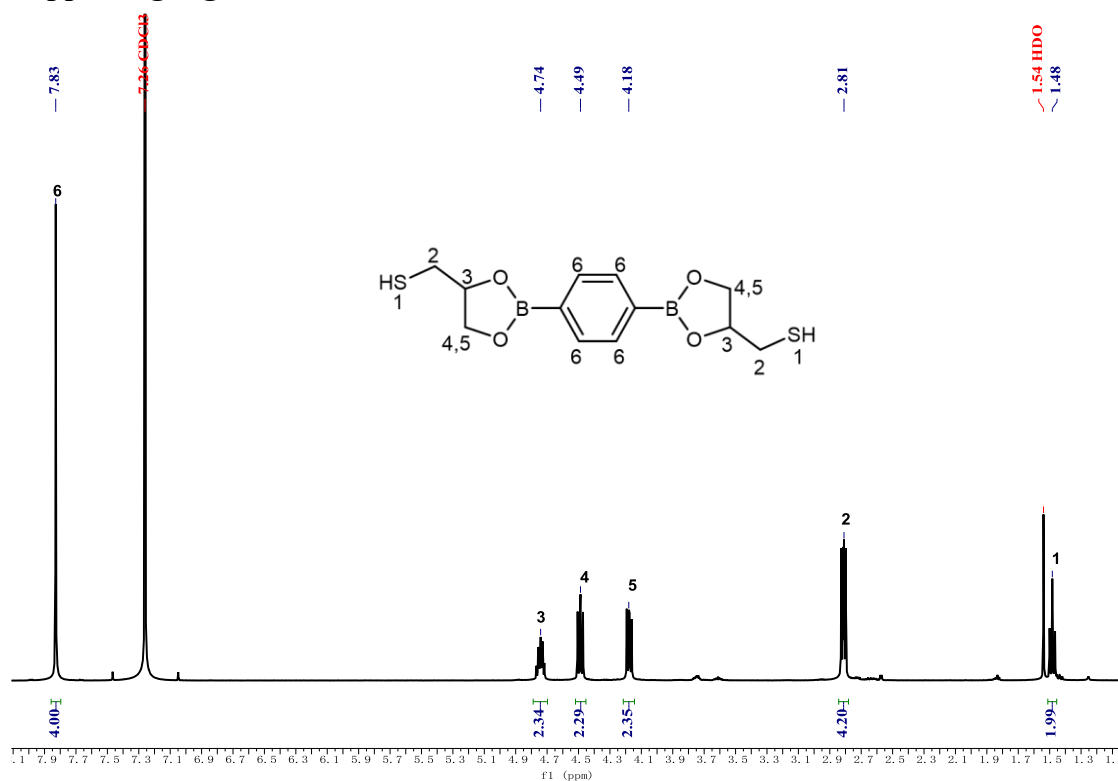


Fig. S1 ¹H NMR spectrum of BDB in CDCl₃ at 25 °C.

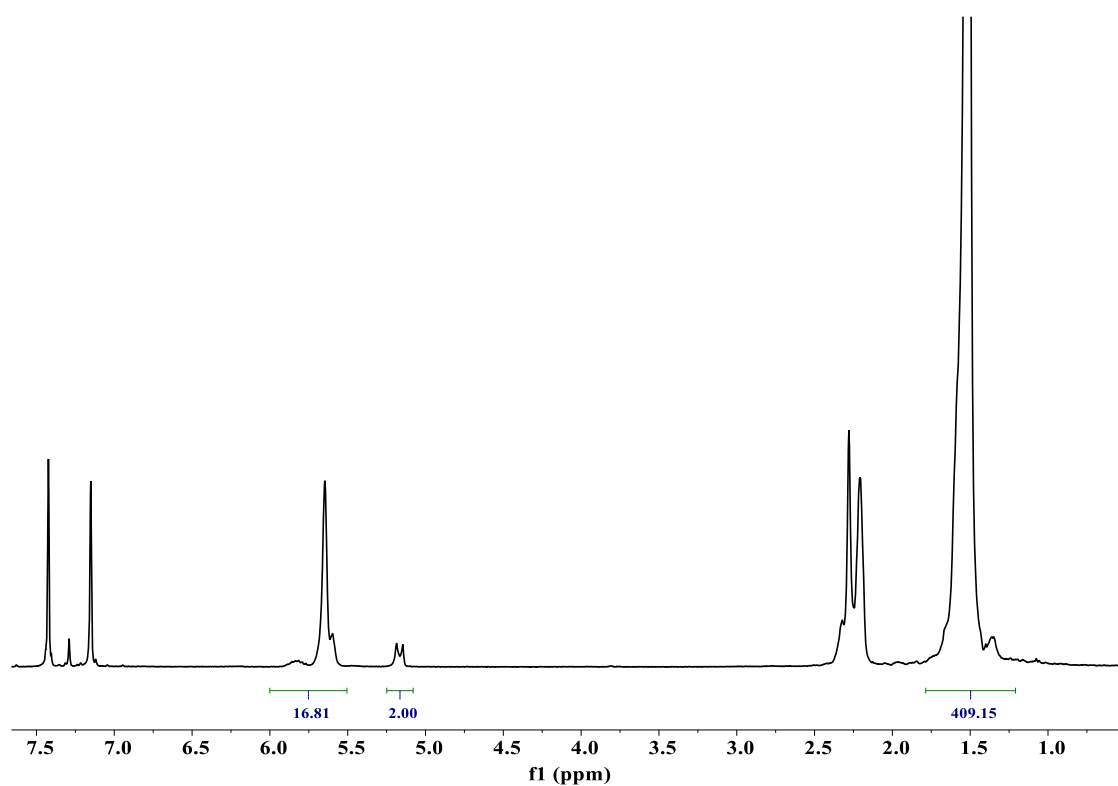


Fig. S2 ¹H NMR spectrum of E-BD copolymer determined in C₆D₄Cl₂ at 110 °C. The ethylene content was calculated according to the following equation: $f_E = [I_{(1.21-1.79)} - 1.5 * I_{5.20}] / [I_{(1.21-1.79)} + I_{(5.50-6.00)} - 0.5 * I_{5.20}] * 100\% = (409.15 - 1.5 * 2) / (409.15 + 2 * 16.81 - 0.5 * 2) = 91.94\%$.

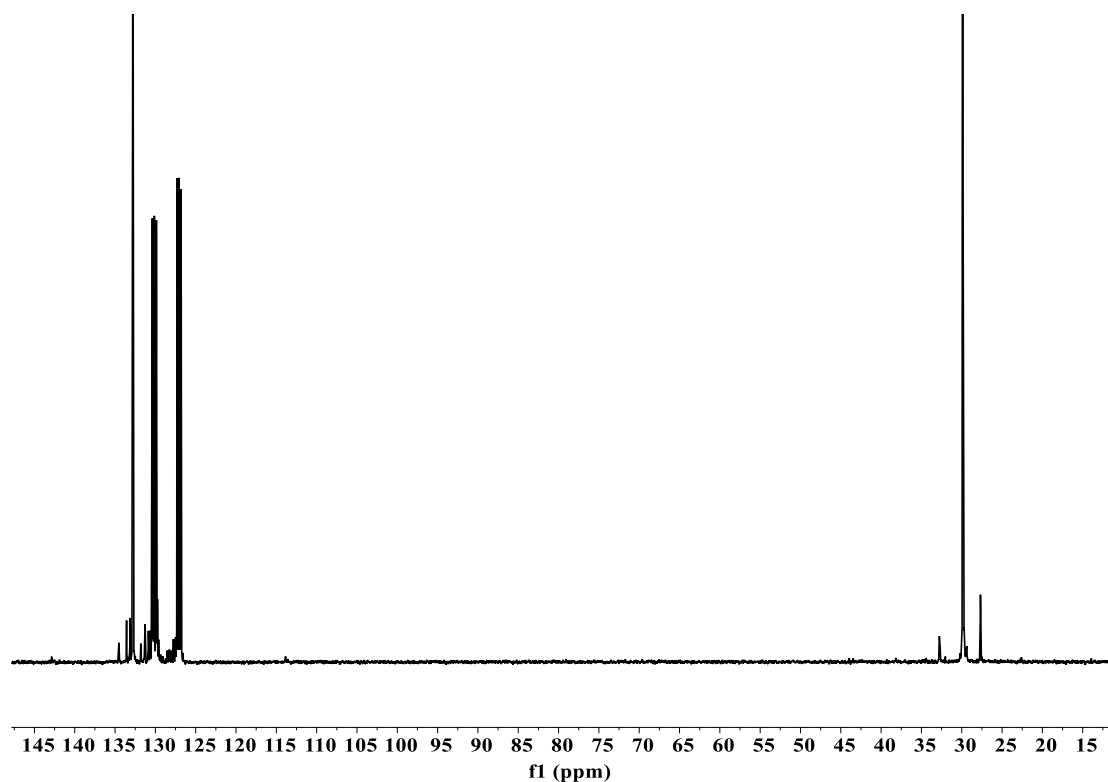


Fig. S3 ^{13}C NMR spectrum of **E-BD** copolymer determined in $\text{C}_6\text{D}_4\text{Cl}_2$ at 110°C .

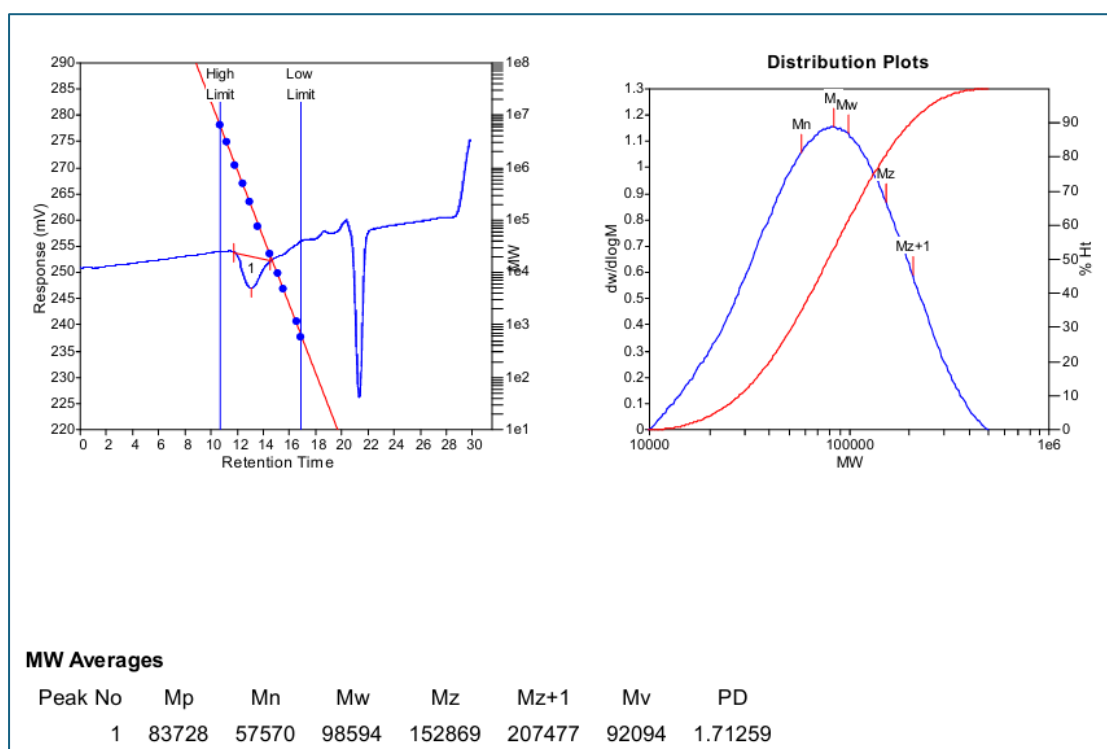


Fig. S4 GPC curve of **E-BD** copolymer.

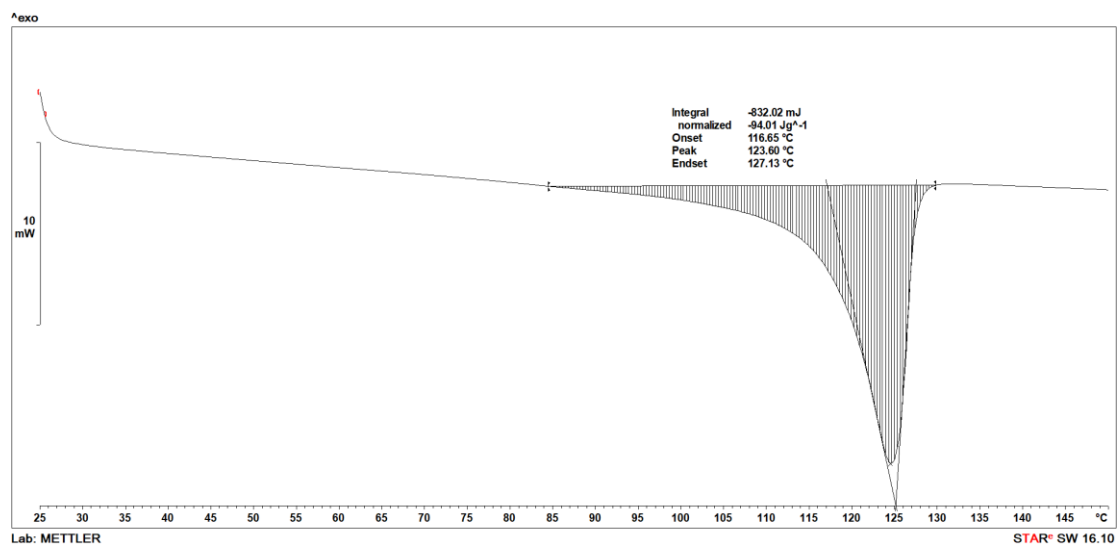


Fig. S5 DSC curve of **E-BD** copolymer.

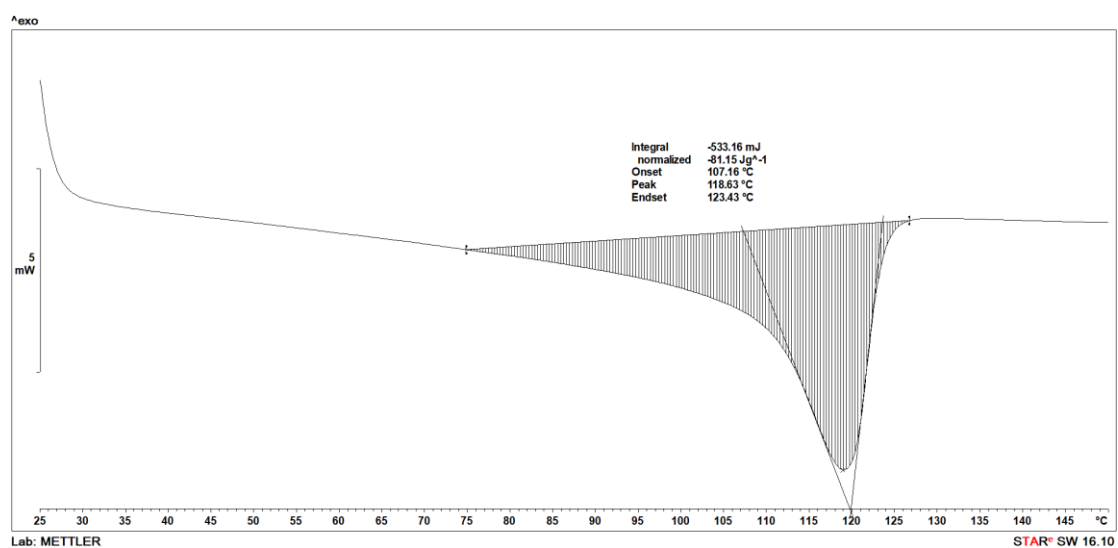


Fig. S6 DSC curve of **XEBD1**.

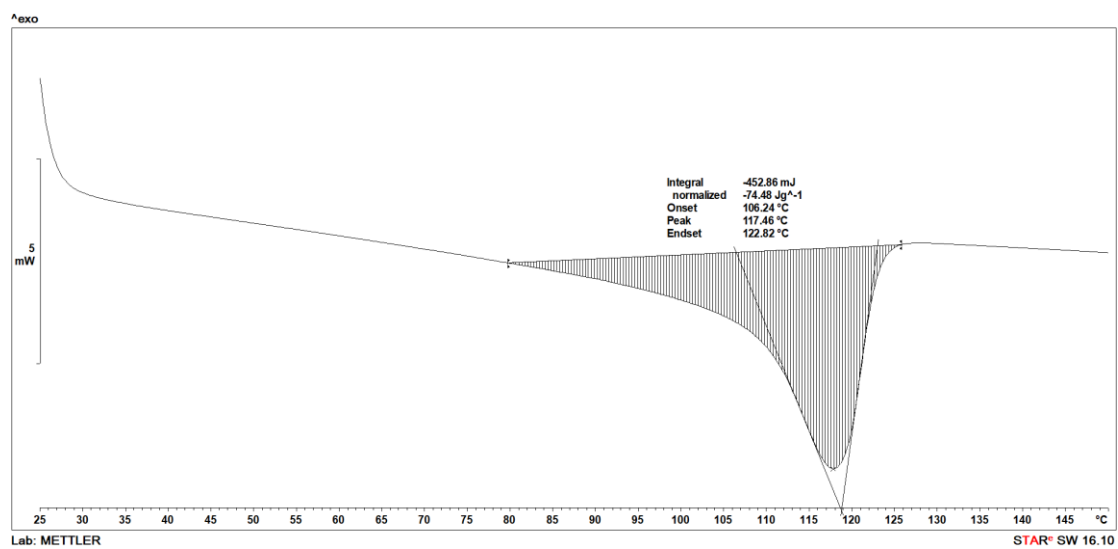


Fig. S7 DSC curve of **XEBD2**.

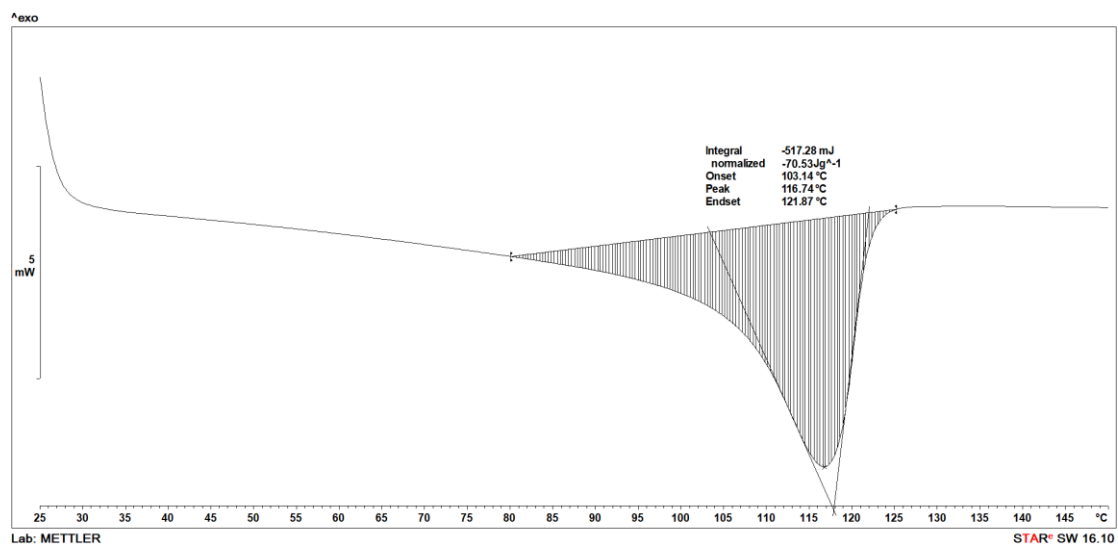


Fig. S8 DSC curve of XEBD3.

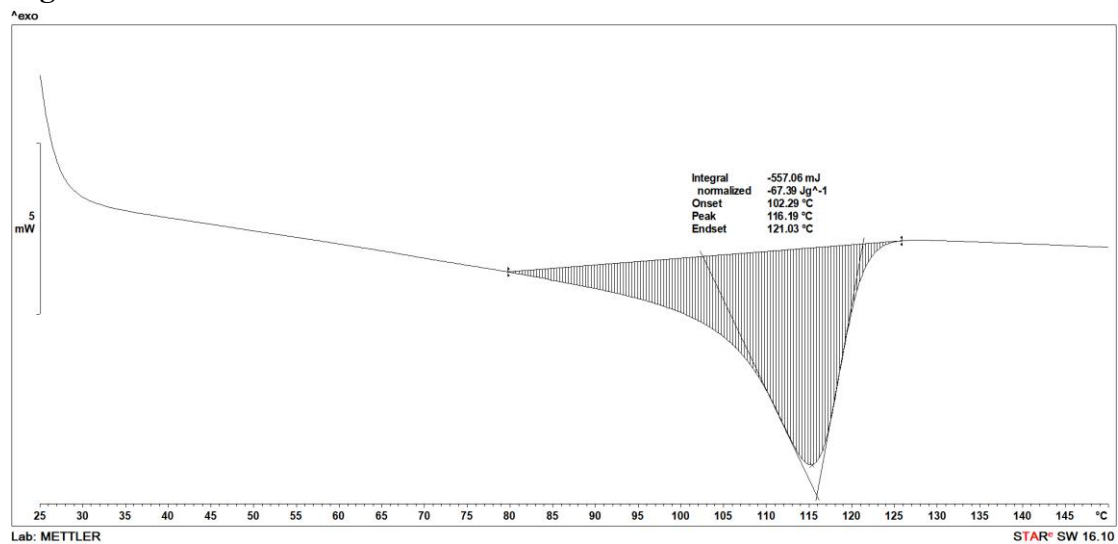


Fig. S9 DSC curve of XEBD4.

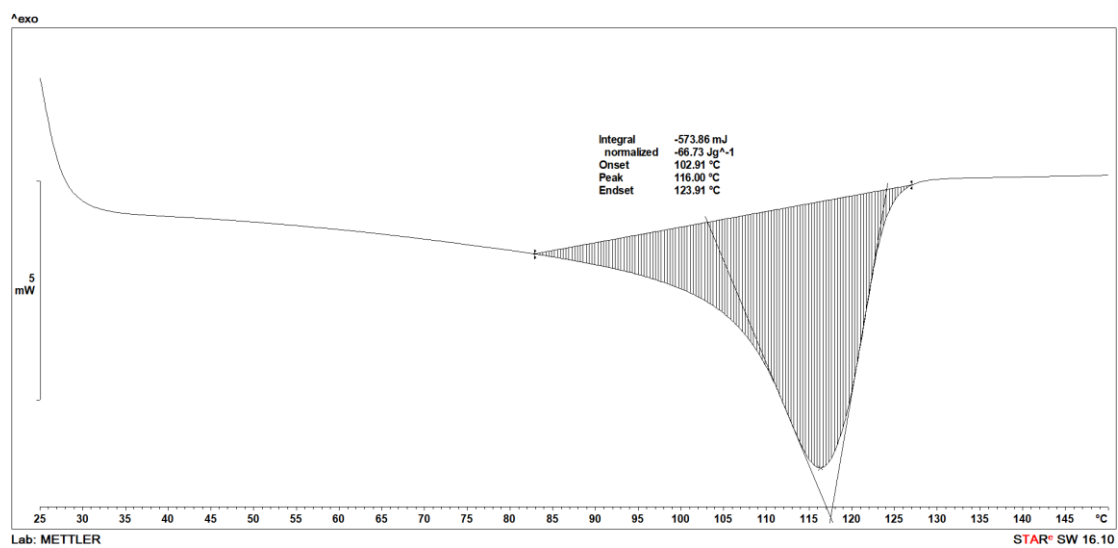


Fig. S10 DSC curve of XEBD5.

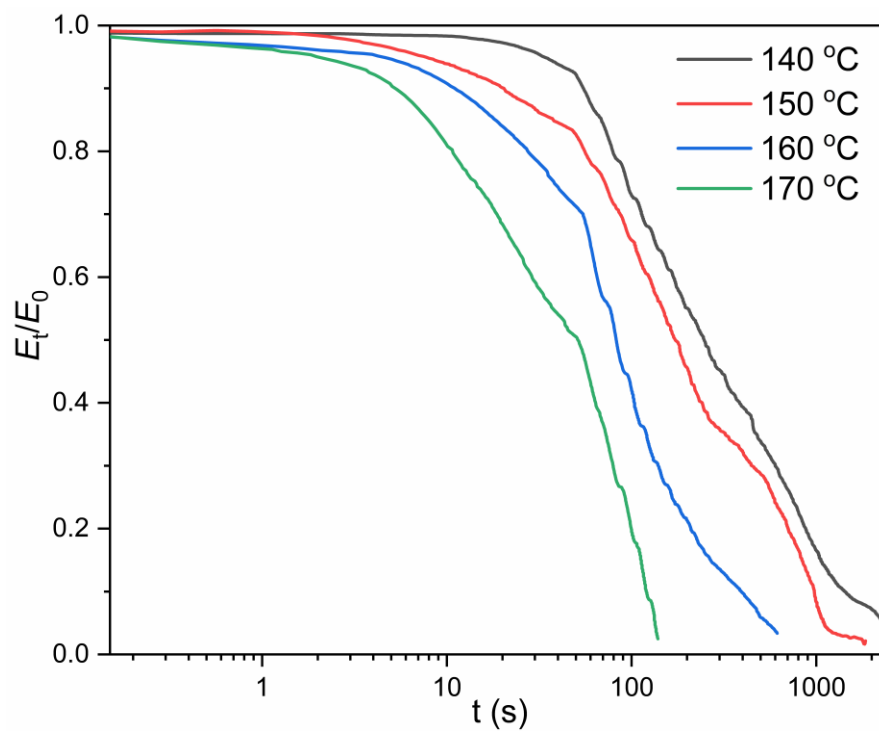


Fig. S11 Stress relaxation curves of **XEBD3** at different temperatures