

## **Supporting Information**

# **Microphase Separation Mode-Dependent Mechanical Response in Poly(vinyl ester)/PEO Triblock Copolymers**

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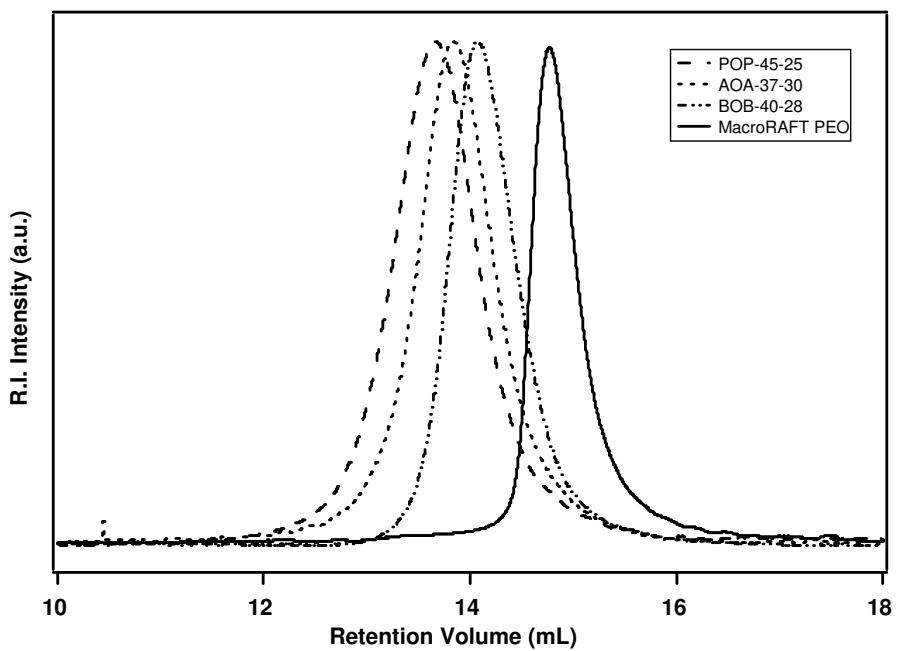
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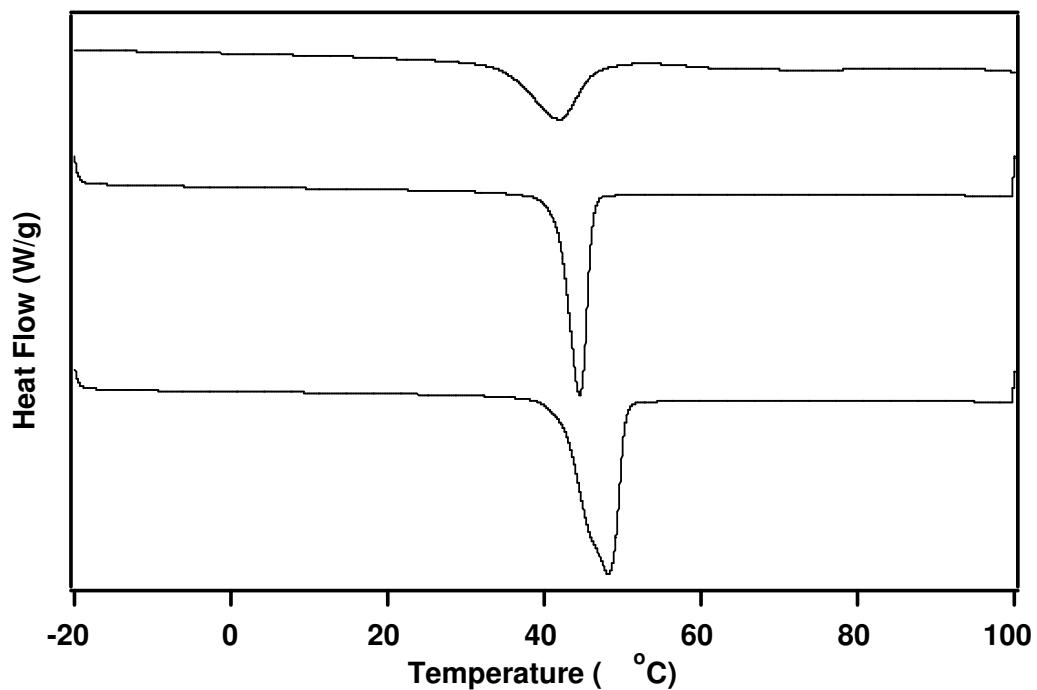
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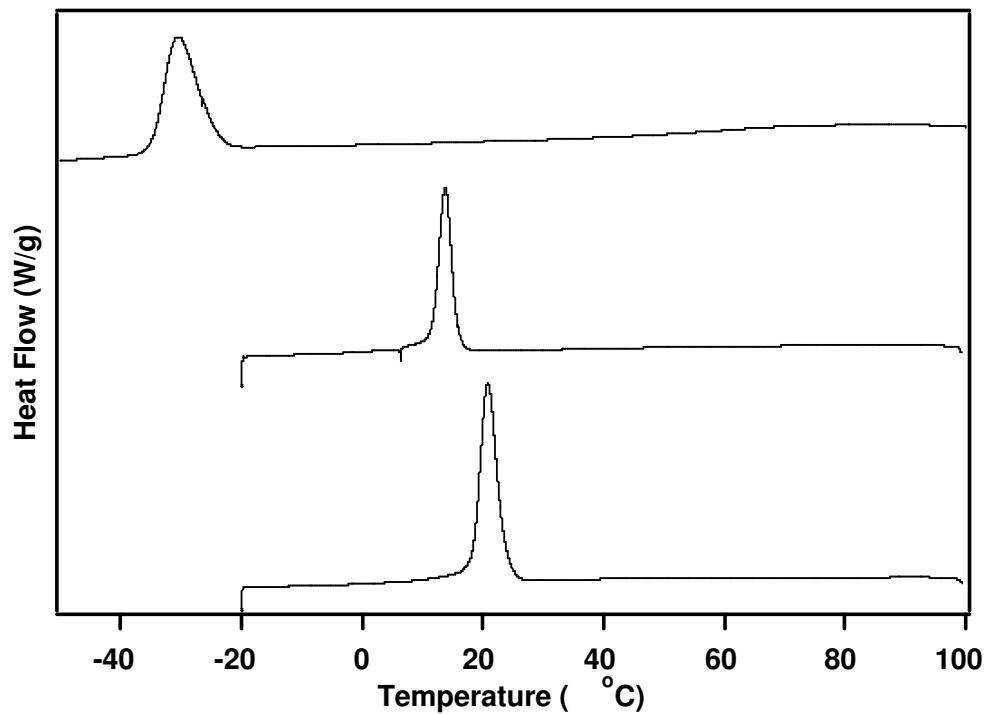
**Figure S1.** Representative SEC traces from POP-45-25, AOA-37-30, BOB-40-28, and MacroRAFT PEO **1**.



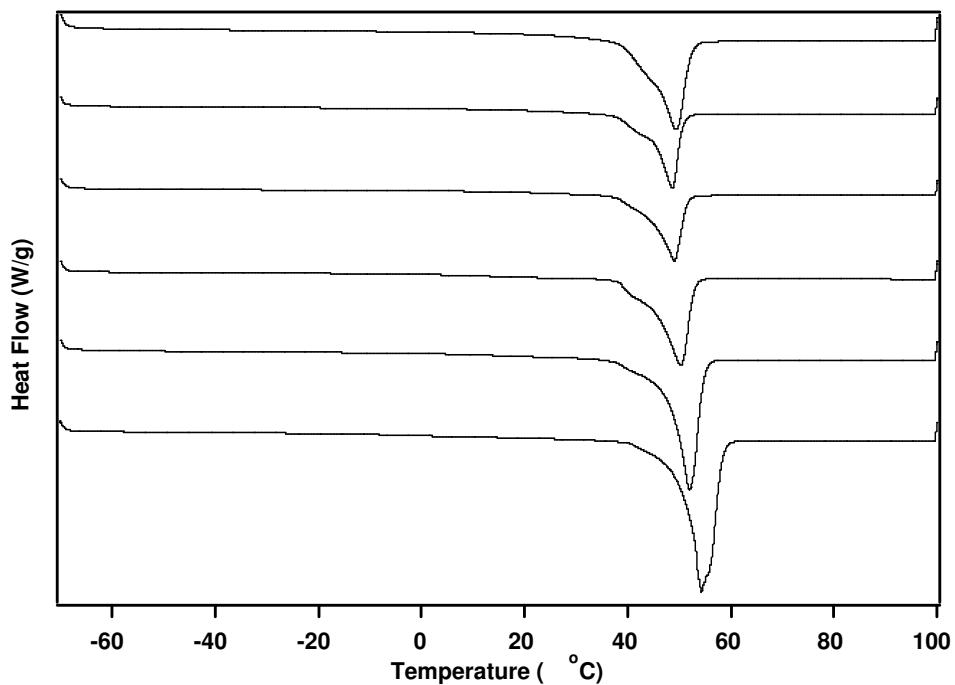
**Figure S2.** DSC traces for POP samples upon heating. From bottom to top: a) POP-23-50, b) POP-31-37, and c) POP-45-25.



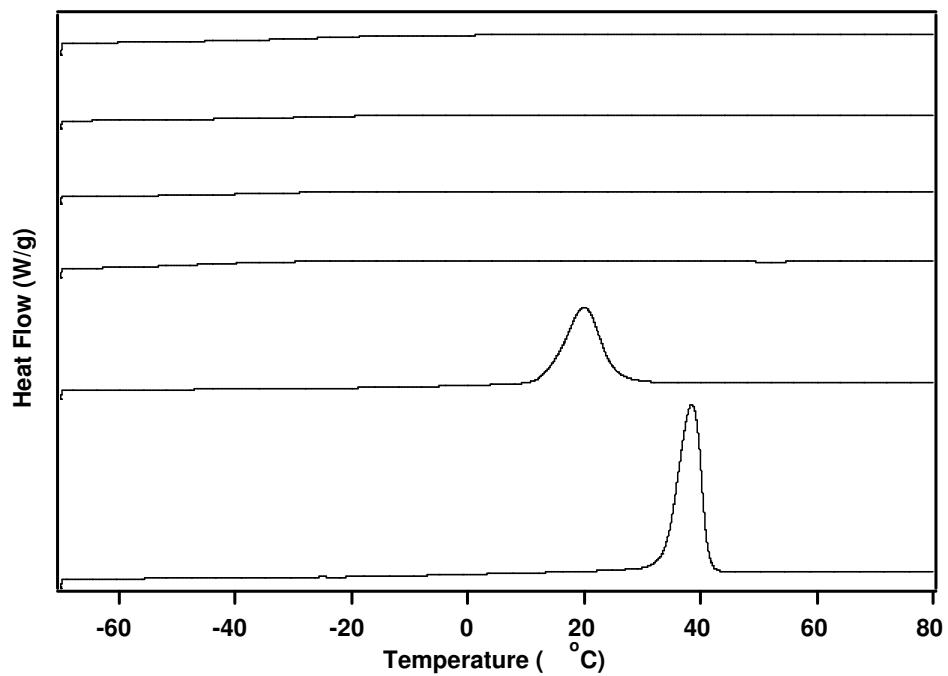
**Figure S3.** DSC traces for POP samples upon cooling. From bottom to top: a) POP-23-50, b) POP-31-37, and c) POP-45-25.



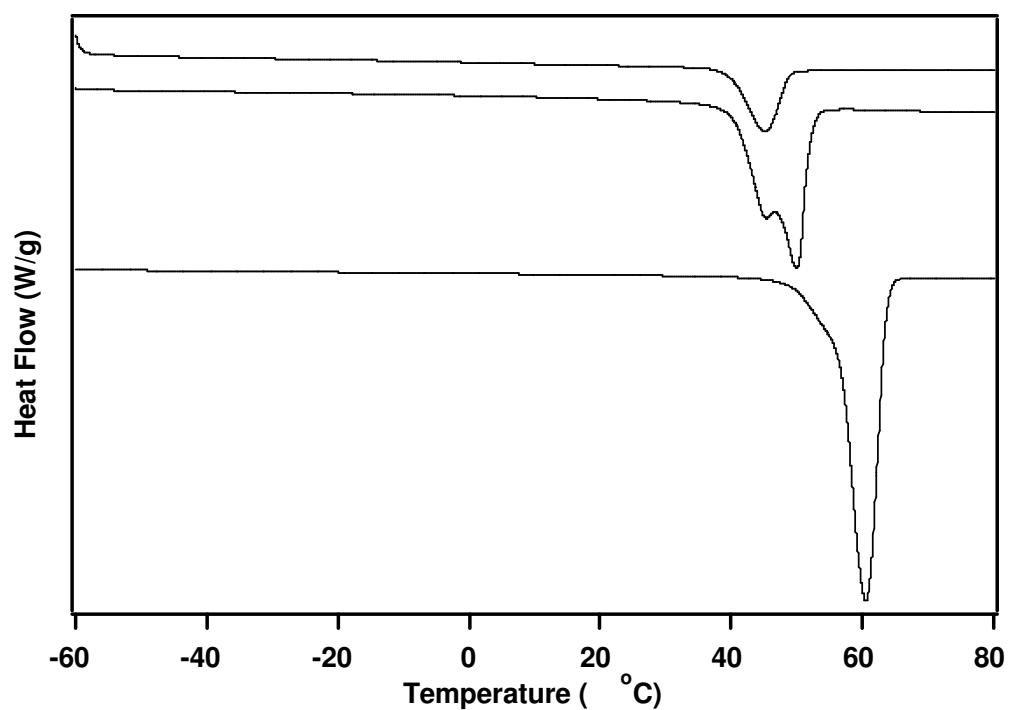
**Figure S4.** DSC traces for AOA samples upon heating. From top to bottom: a) AOA-31-37, b) AOA-29-39, c) AOA-27-43, d) AOA-22-51, e) AOA-18-64, and f) AOA-15-76.



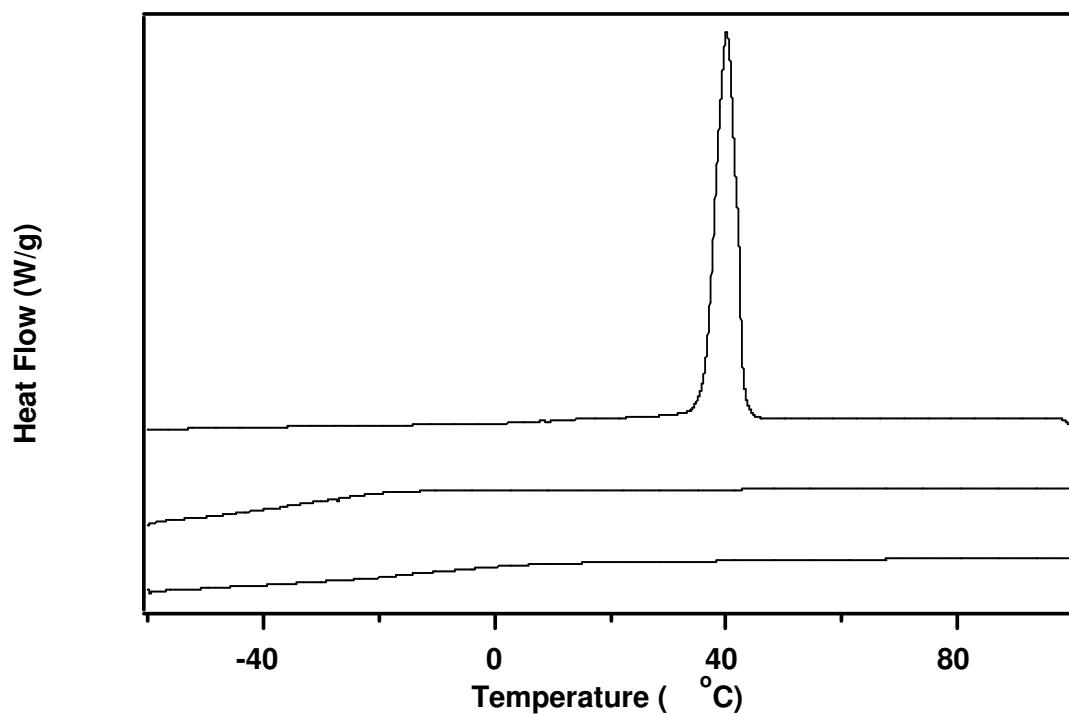
**Figure S5.** DSC traces for AOA samples upon cooling. From top to bottom: a) AOA-31-37, b) AOA-29-39, c) AOA-27-43, d) AOA-22-51, e) AOA-18-64, and f) AOA-15-76.



**Figure S6.** DSC traces for PEO and BOB samples upon heating. From bottom to top: a) MacroRAFT PEO **1**, b) BOB-26-44, and c) BOB-33-35.



**Figure S7.** DSC traces for PEO and BOB samples upon cooling. From bottom to top: a) BOB-33-35 , b) BOB-26-44, and c) MacroRAFT PEO **1**.



**Figure 9.** Representative the Stress-Strain curve for B/O blend showing that the maximum strain at break is < 10.0 %.

