Supporting Information

Aggregation and Rheology of an Azobenzene Functionalized Hydrophobically Modified Ethoxylated Urethane in Aqueous Solution

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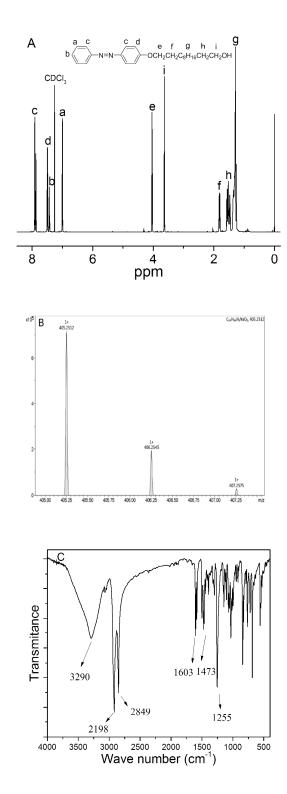


Figure S1. (A) 1 H NMR spectrum of $AzoC_{12}OH$ end capper. (B) Mass spectrometry of $AzoC_{12}OH$ end capper. (C) FTIR spectrum of $AzoC_{12}OH$ end capper.

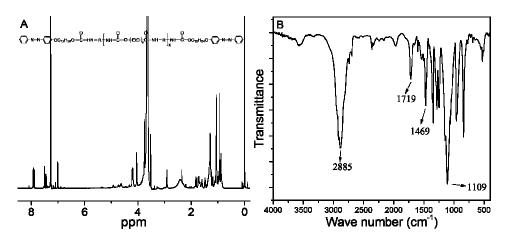


Figure S2. (A) ¹H NMR spectrum of AzoHEUR polymer. (B) FTIR spectrum of AzoHEUR polymer.

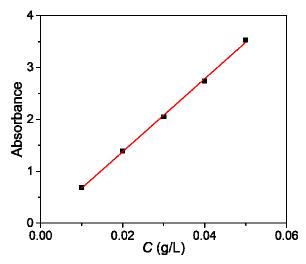


Figure S3. The standard curve obtained from the maximum absorbance of azo end capper with different concentration in 340 nm.

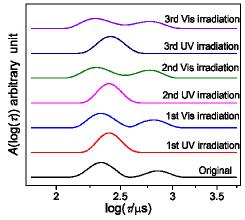


Figure S4. DLS results for 3.0 wt % trans- and cis-AzoHEUR solutions.

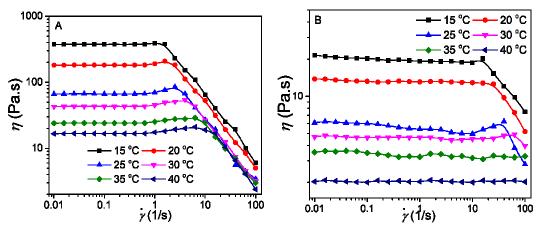


Figure S5. Plots of steady shear viscosity η vs shear rate $\dot{\gamma}$ for 3.0 wt % **AzoHEUR** aqueous solution at different temperature: (A) *trans*-form, (B) *cis*-form.

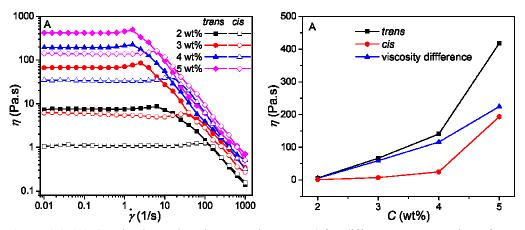


Figure S6. (A) Steady shear viscosity η vs shear rate $\dot{\gamma}$ for difference concentration of *trans*- and *cis*-form **AzoHEUR** aqueous solutions (B) Zero-shear viscosity η_0 and viscosity difference as a function of **AzoHEUR** concentration C.

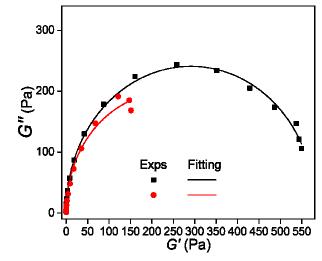


Figure S7. Cole-Cole plots for the 3.0 wt % trans and cis-AzoHEUR aqueous solution at 25 °C.