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Role of Headgroups on the Thermal Stability, Rheology and Foaming Properties of Novel Betaine Type Polyoxyethylene Surfactants

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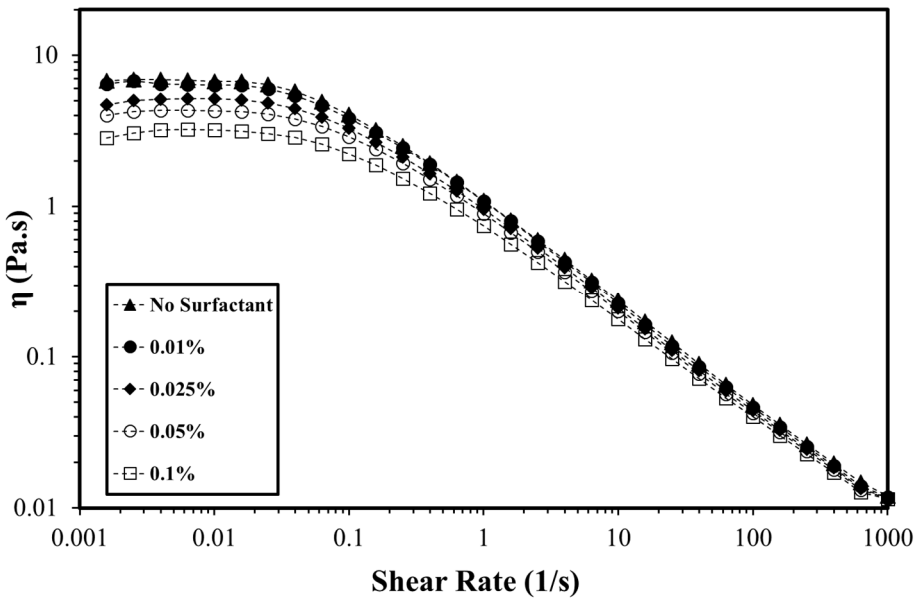

Figure S1. Steady shear viscosity of the polymer at different OPAH surfactant concentrations in deionized water (T= 80 °C, Polymer concentration=0.25 %).

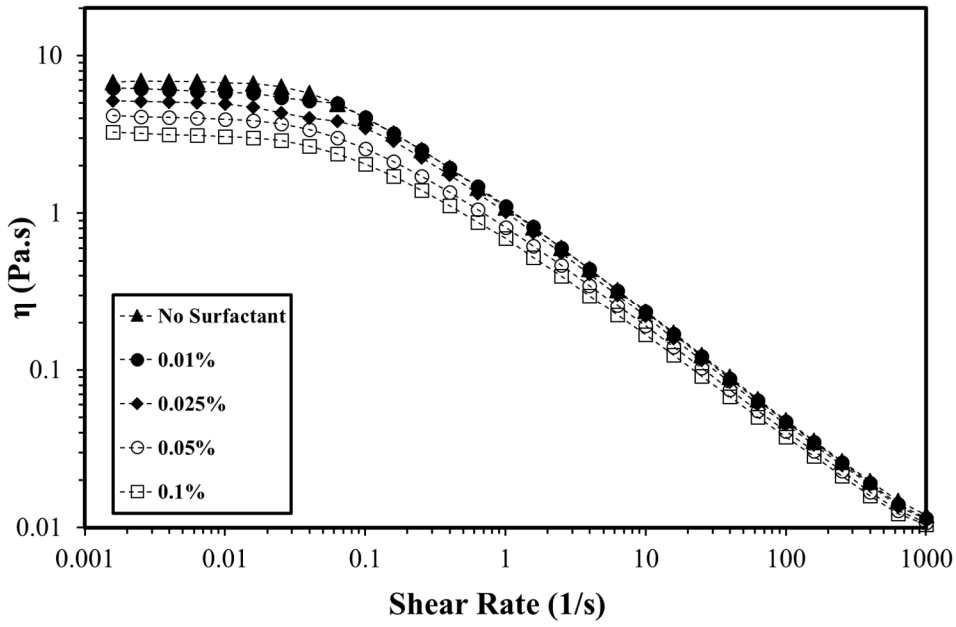

Figure S2. Steady shear viscosity of the polymer at different OPAS surfactant concentrations in deionized water (T= 80 °C, Polymer concentration=0.25 %).

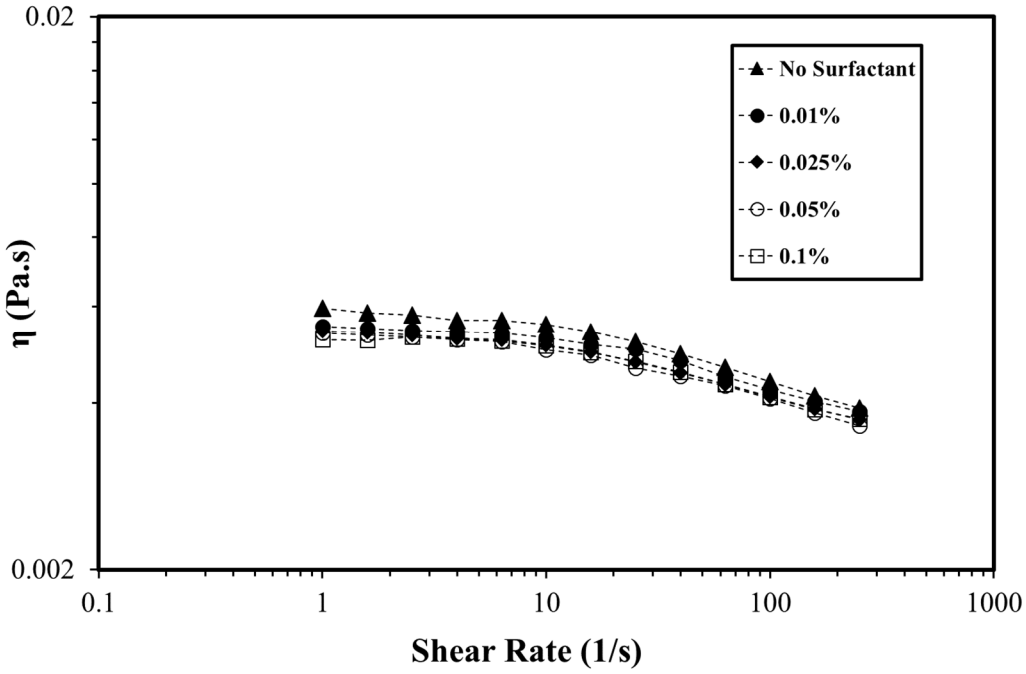

Figure S3. Steady shear viscosity of the polymer at different OPAH surfactant concentrations in seawater (T= 80 °C, Polymer concentration=0.25 %).

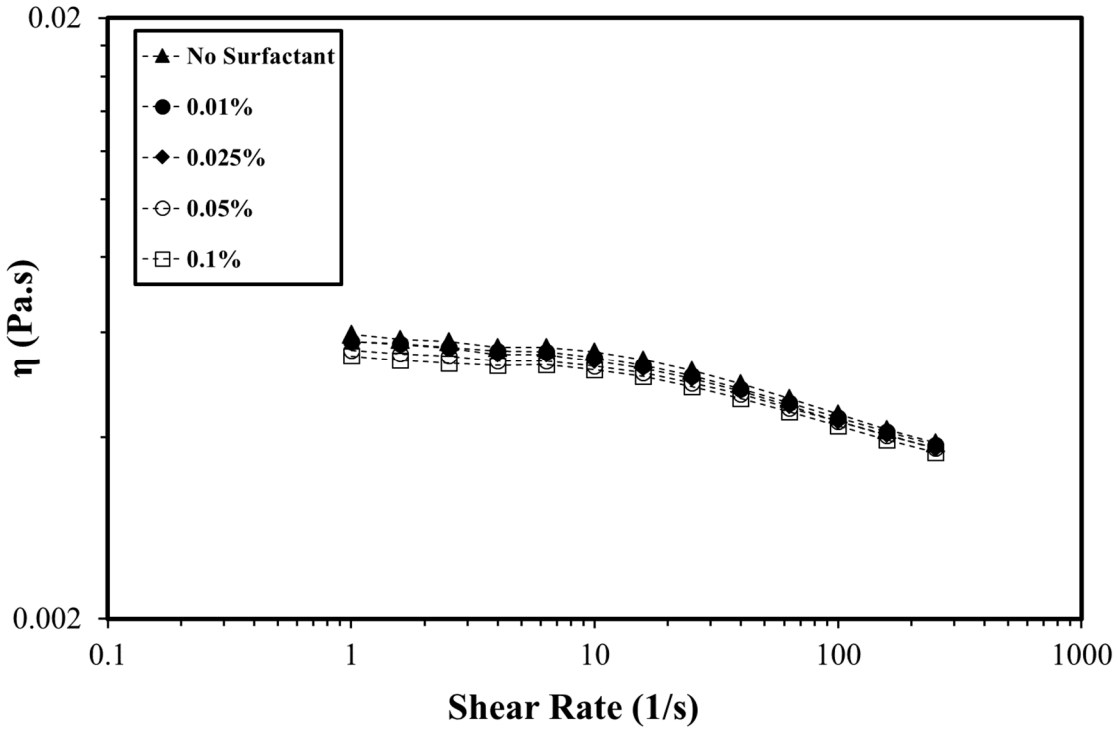

Figure S4. Steady shear viscosity of the polymer at different OPAH surfactant concentrations in seawater (T= 80 °C, Polymer concentration=0.25 %).

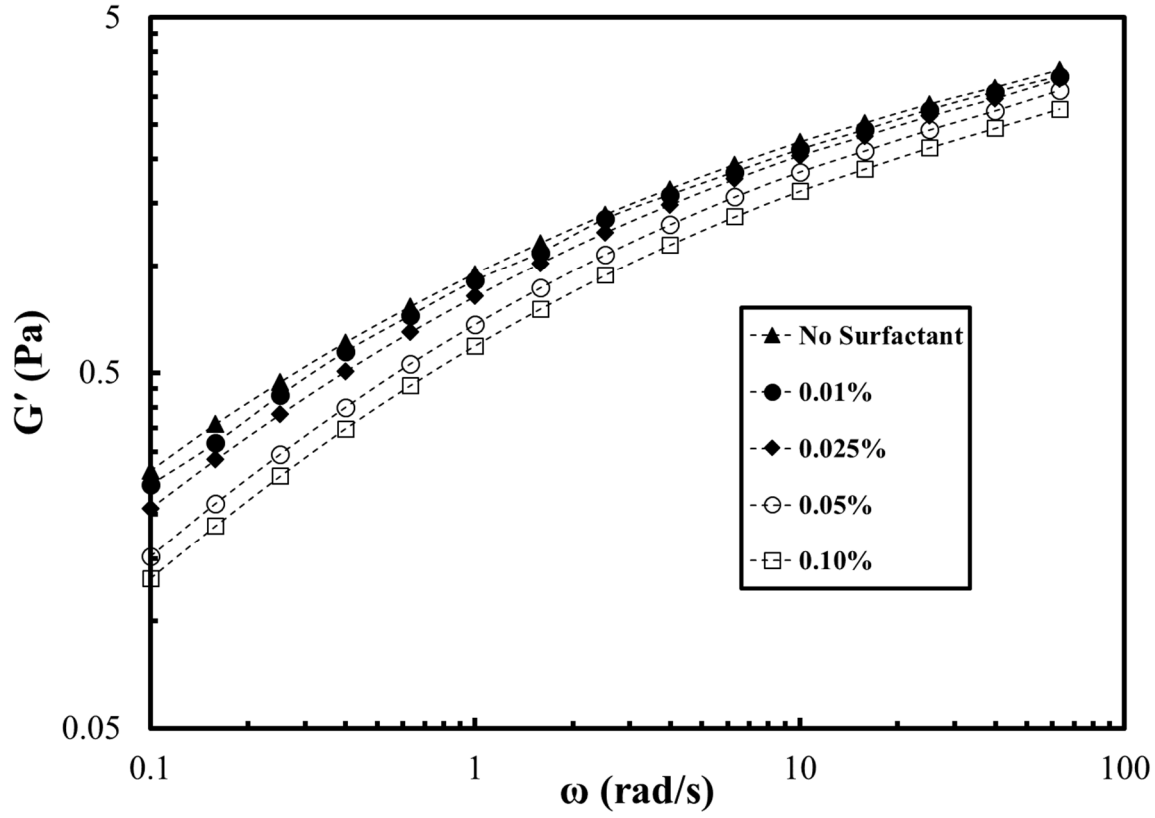

Figure S5. Storage modulus of the polymer at different OPAH surfactant concentrations in deionized water (T= 80 °C, Polymer concentration=0.25 %).

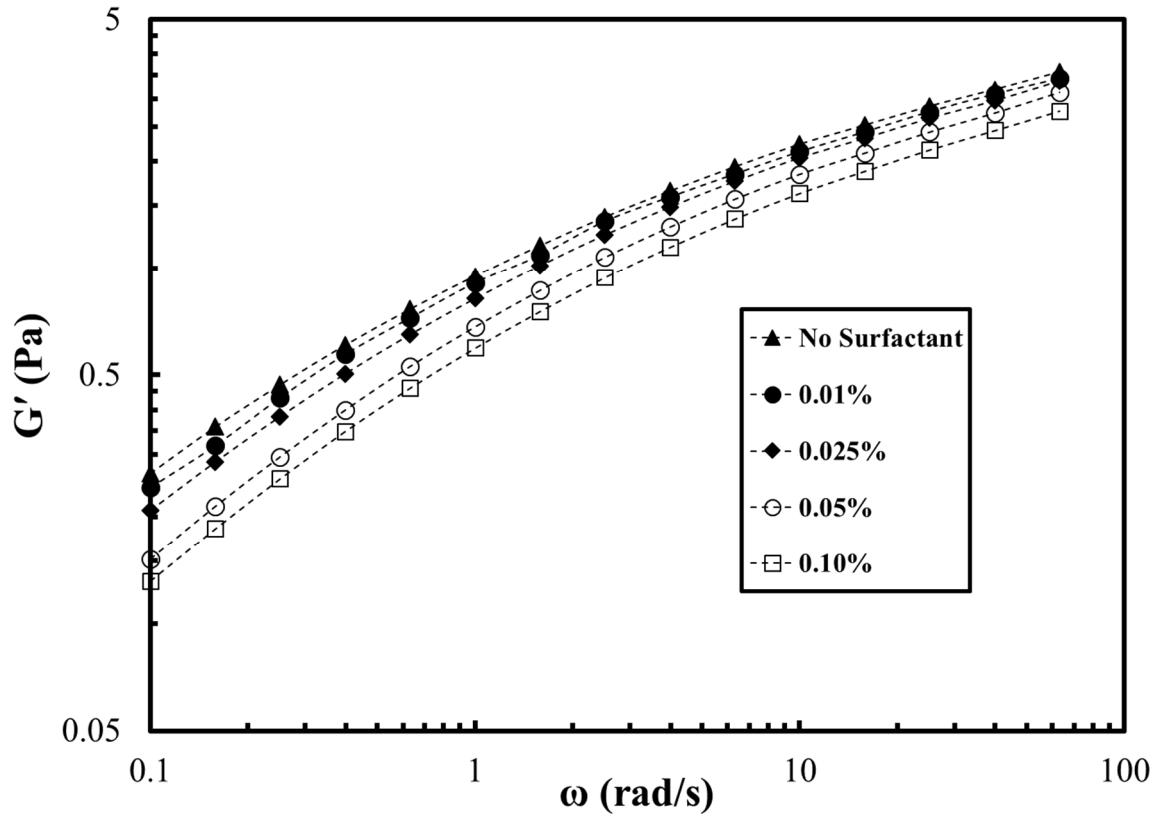

Figure S6. Storage modulus of the polymer at different OPAH surfactant concentrations in deionized water (T= 80 °C, Polymer concentration=0.25 %).

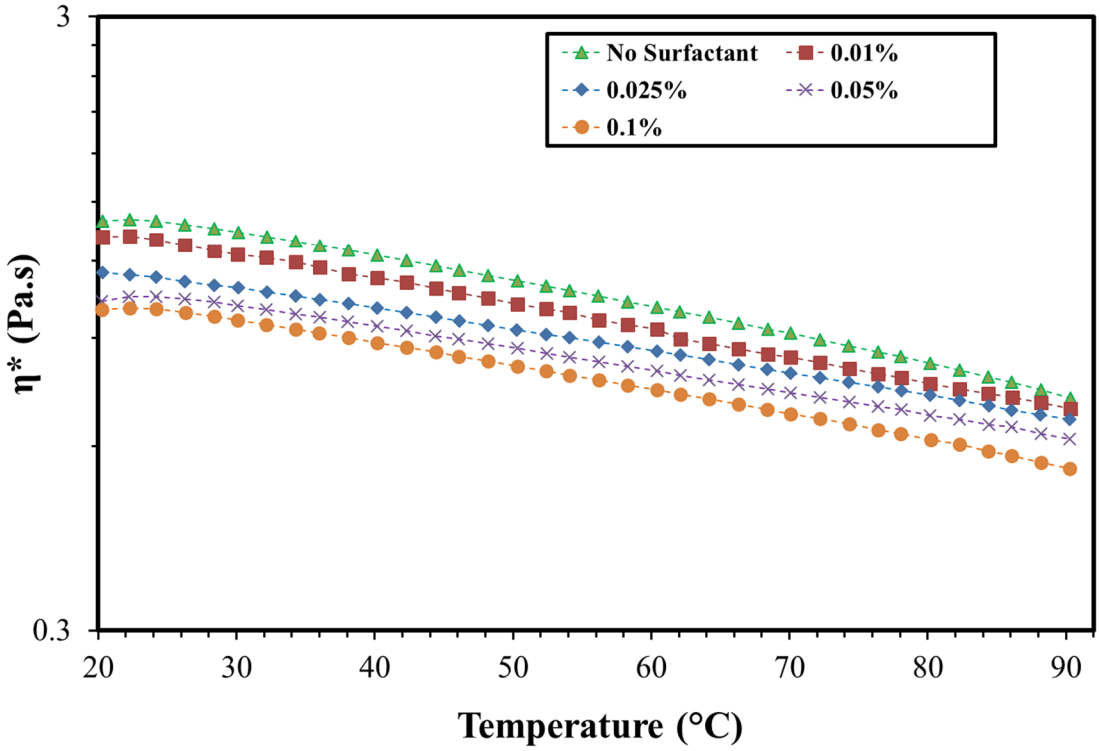

Figure S7. The viscosity of the polymer at different OPAH surfactant concentration in deionized water (Frequency= 1 rad/s, Polymer concentration= 0.25 %)

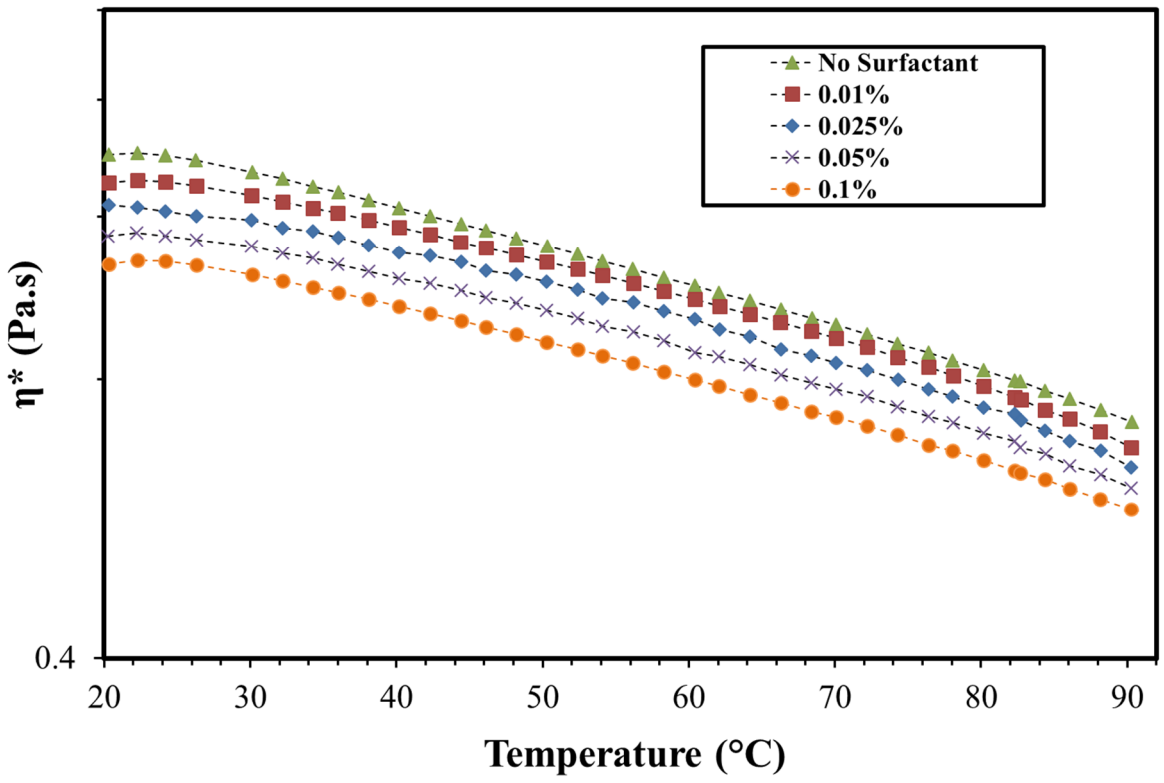

Figure S8. The viscosity of the polymer at different OPAS surfactant concentration in deionized water (Frequency= 1 rad/s, Polymer concentration= 0.25 %)

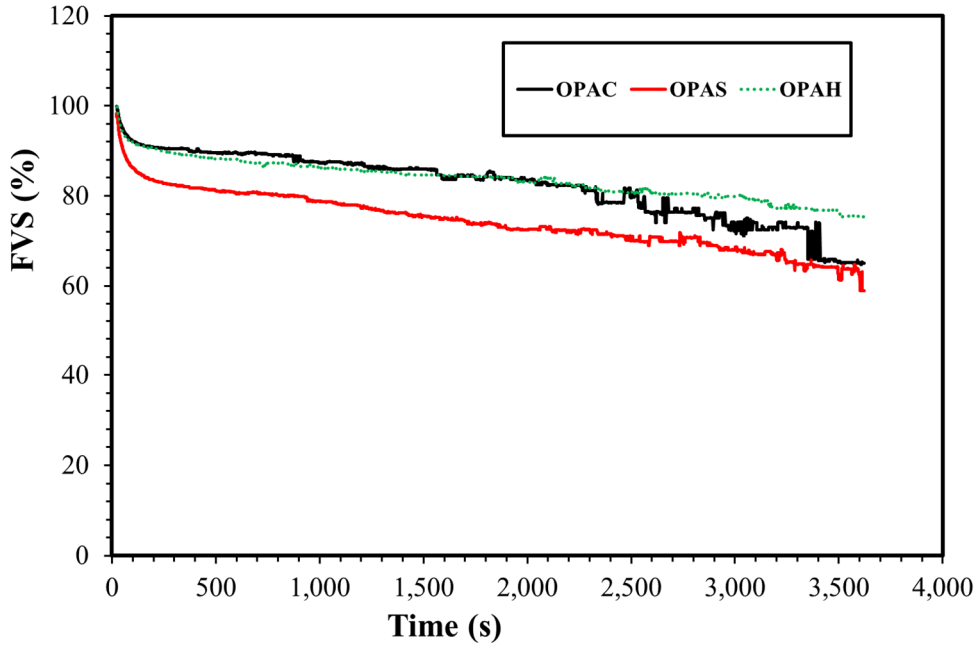

Figure S9. Foam volume stability of all surfactants in deionized water.

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