List of Symbols and Abbreviations

\( \tau \) Shear stress (Pa)
\( \tau_\circ \) or C Yield stress
\( \gamma \) Shear rate (sec\(^{-1}\))
\( k \) Consistency index
\( n \) Flow behavior index
\( C_A \) Concentration of Partially hydrolyzed polyacrylamide (PHPA) (gm/liter)
\( C_B \) Concentration of Hexamine (HMTA) (gm/liter)
\( C_C \) Concentration of Hydroquinone (gm/liter)
\( t \) Gelation Time (second)
\( T \) Temperature (°K)
\( k, k', k'' \) Reaction rate/proportionality constants
\( C_{A0} \) Initial concentrations of polymer
\( C_{B0} \) Initial concentrations of hexamine
\( C_{C0} \) Initial concentrations of hydroquinone
\( E_a \) Activation energy
\( R \) Gas constant
\( a_0, a_1, a_2, a_3, a_4 \) Constants
\( a, b \) & c Reaction order with respect to A, B & C
\( \alpha, \beta \) & \( \gamma \) Reactant of species A, B & C present in the reaction respectively
\( F_{rr} \) Residual resistance factor