

Figure 1S. TGA thermogram for laponite RD at the heating rate of 10 $^{\circ}$ C min⁻¹.

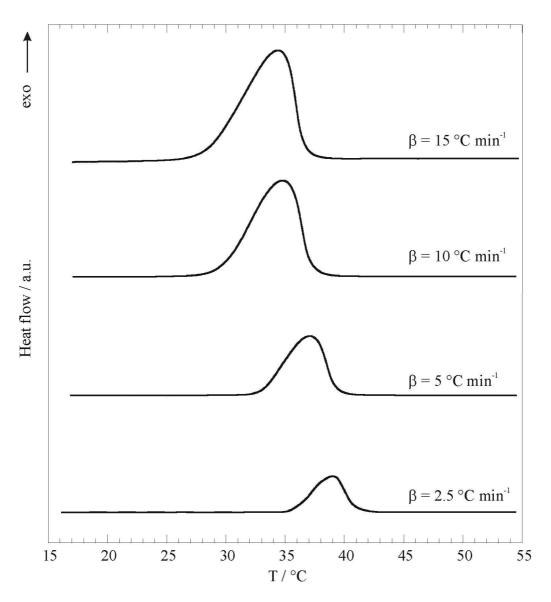


Figure 2S. DSC curves of pure F127 at various cooling rates.

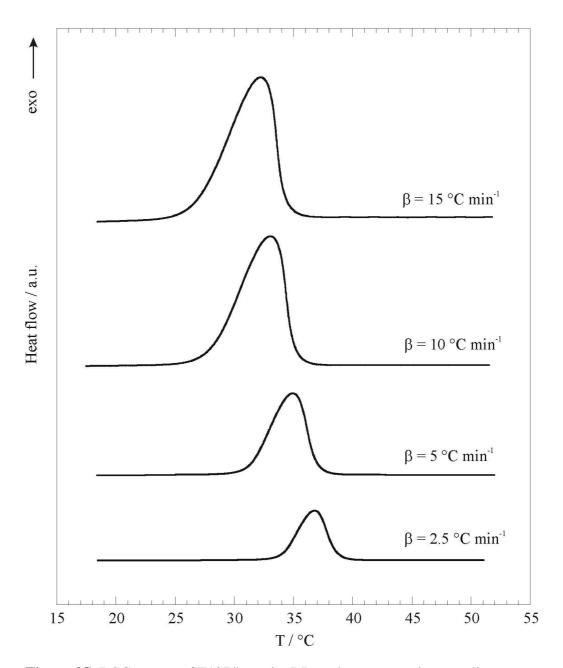


Figure 3S. DSC curves of F127/laponite RD at the cac at various cooling rates.

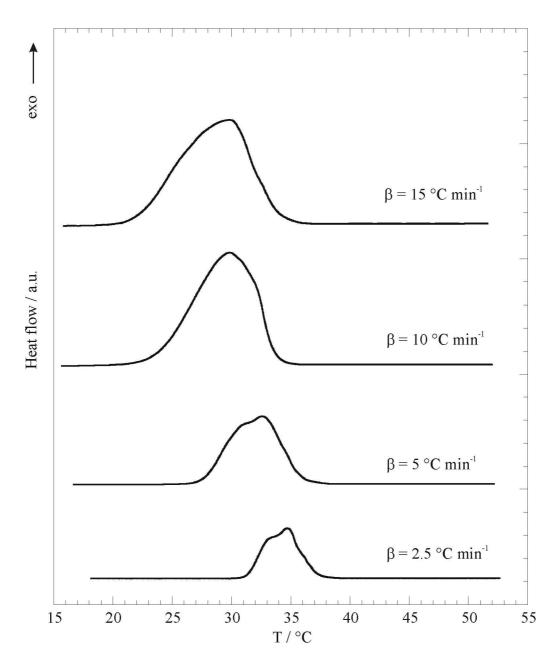


Figure 4S. DSC curves of pure PEG 2000 at various cooling rates.

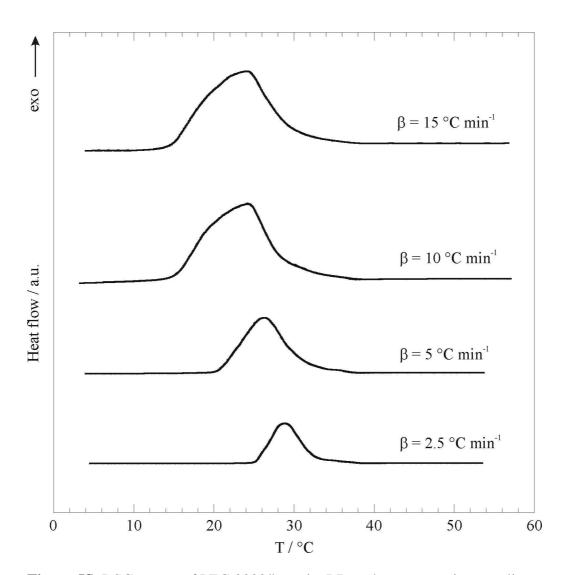


Figure 5S. DSC curves of PEG 2000/laponite RD at the cac at various cooling rates.

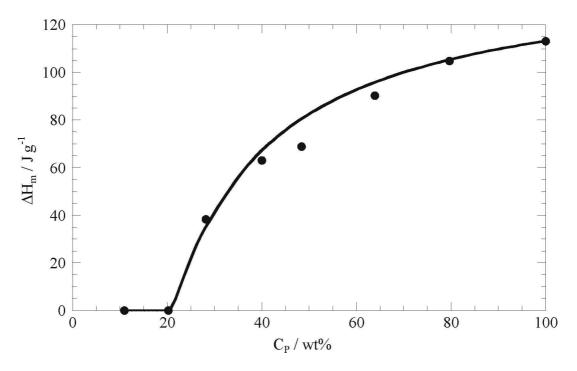


Figure 6S. Dependence on the copolymer weight percent of the enthalpy of melting for the F127/laponite RD mixtures. Line is calculated according to Eq. 1 of the MS.

Procedure to calculate the cac value

By defining the amount of macromolecule which can be associated to 1 gram of laponite RD (ω) as cac/(100-cac), Eq. 2b of the MS can be rewritten as

$$x_{\rm f} = 1 + \omega - \frac{100 \,\omega}{C_{\rm P}} \qquad \qquad \text{for } C_{\rm P} > \text{cac}$$
 (1s)

By introducing Eq. 1s into Eq. 1 of the MS the latter predicts a linear decrease of ΔH_m with $1/C_P$ provided by the melting of the free copolymer. The intersection of such a straight-line with the abscissa axis gives the cac value. Using the cac and ΔH_m^* values, ΔH_m was calculated by means of Eq. 1 of the MS and fitted very well the experimental points (Figure 6s).