Supporting Information for

Synergism and Formation of Vesicle Gels in Salt-Free Catanionic Hydrocarbon/Fluorocarbon Surfactant Mixtures

Fig. S1. Variation of storage modulus ($G'$), viscous modulus ($G''$) and complex viscosity ($|\eta^*|$) as a function of angular frequency for vesicle gels formed in $C_{14}DMAO/TFOPA$ system. $c_{C14DMAO} = 300$ mmol·L$^{-1}$, $X_{TFOPA} = 0.285$ (a), 0.333 (b), 0.362 (c), 0.388 (d) and 0.412 (e), respectively.
Fig. S2. Variation of storage modulus (G’), viscous modulus (G'”) and complex viscosity (|η*|) as a function of angular frequency for vesicle gels formed in C_{14}DMAO/HFDPA system. c_{C14DMAO} = 300 mmol·L$^{-1}$, X_{HFDPA} = 0.268 (a), 0.318 (b), 0.348 (c), 0.375 (d), 0.400 (e) and 0.434 (f) respectively.
Fig. S3. Variation of storage modulus ($G'$), viscous modulus ($G''$) and complex viscosity ($|\eta^*|$) as a function of angular frequency of 150 mmol·L$^{-1}$ HFDPA mixed with 250 (a), 300 (b), 350 (c) and 400 (d) mmol·L$^{-1}$ C$_{14}$DMAO.
Fig. S4. Variation of the complex viscosity as a function of angular frequency for the samples with XHFDPA = 0.325 and increasing $c_{C_{14}DMAO}$ as shown inset.
Fig. S5. Variation of storage modulus ($G'$), viscous modulus ($G''$) and complex viscosity ($|\eta^*|$) as a function of angular frequency for a gel phase formed in C$_{14}$DMAO/HFDPA system with $c_{C14DMAO} = 300$ mmol·L$^{-1}$ and $X_{HFDPA} = 0.318$ at different temperatures.
Fig. S6. IR spectra of solid C\textsubscript{14}DMAO (a), 300 mmol·L\textsuperscript{-1} C\textsubscript{14}DMAO aqueous solution (b), solid TFOPA (c) and different phases from C\textsubscript{14}DMAO/TFOPA mixtures: $X_{\text{TFOPA}} = 0.143$ (d, L\textsubscript{1} phase); $X_{\text{TFOPA}} = 0.200$ (e, fluid L\textsubscript{\alpha} phase); $X_{\text{TFOPA}} = 0.221$ (f, gel phase) and $X_{\text{TFOPA}} = 0.286$ (g, gel phase).

Fig. S7. The magnified plots of the DSC traces in the range of 50-80°C. For the meaning of each curve, see the figure caption of Fig. 15 in the maintext.
**Table S1.** Variation of the molar fraction of TFOPA (or HFDPA) in the mixed aggregates ($X_i^m$) and the interaction parameter between TFOPA (or HFDPA) and C_{14}DMAO ($\beta_\alpha$) at various $X_{TFOPA}$ (of $X_{HFDPA}$).

<table>
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<tr>
<th>$X_{TFOPA} (\alpha_i)$</th>
<th>$X_i^m$</th>
<th>$\beta_\alpha$</th>
<th>$X_{HFDPA} (\alpha_i)$</th>
<th>$X_i^m$</th>
<th>$\beta_\alpha$</th>
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