

Figures

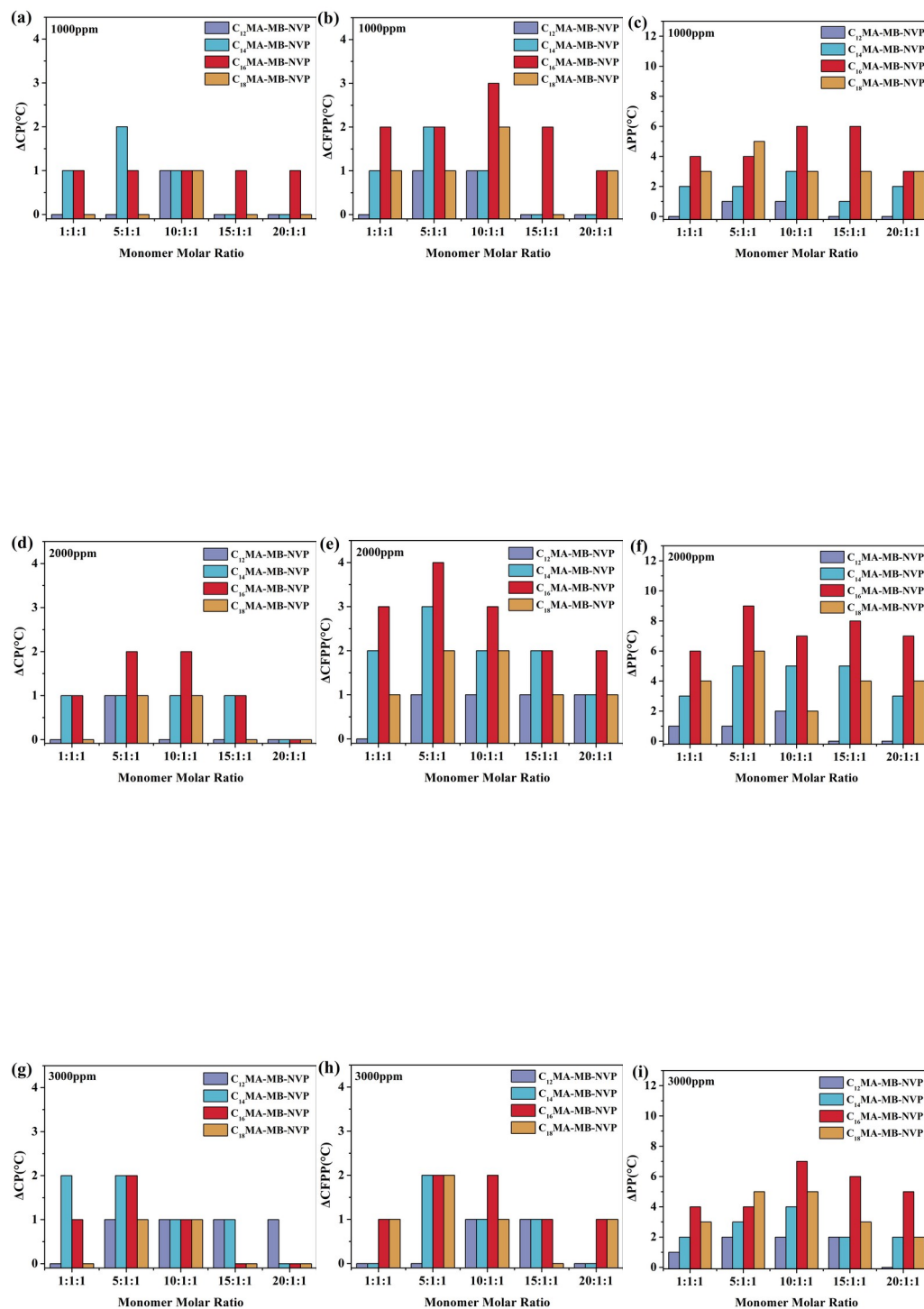
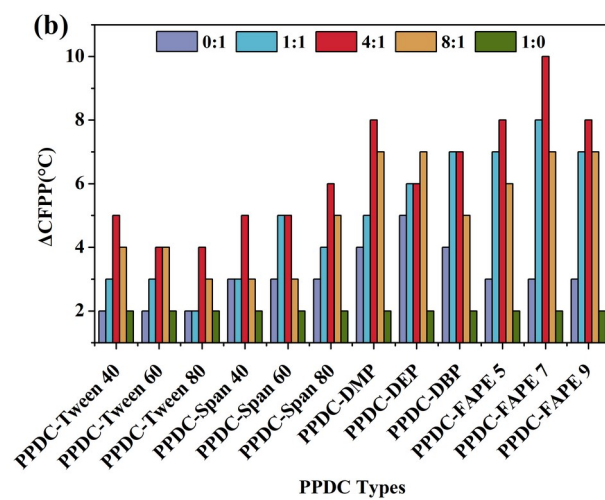
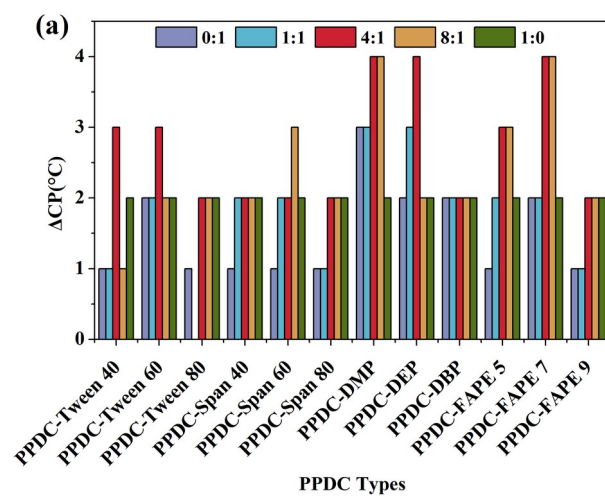


Fig 1 Effects of 1000 ppm (a, b, and c), 2000 ppm (d, e, and f) and 3000 ppm (g, h, and i) RMC-MB-NVP terpolymers on ΔCP , $\Delta CFPP$, and ΔPP of B20



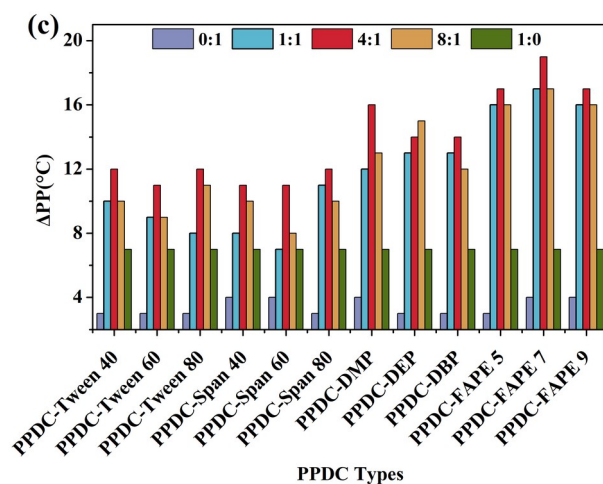


Fig 2 Effect of 2000 ppm C₁₆MC-MB-NVP combined with Span, Tween, PAEs, and FAPE dispersants on the Δ CP (a), Δ CFPP (b), and Δ PP (c) of B20

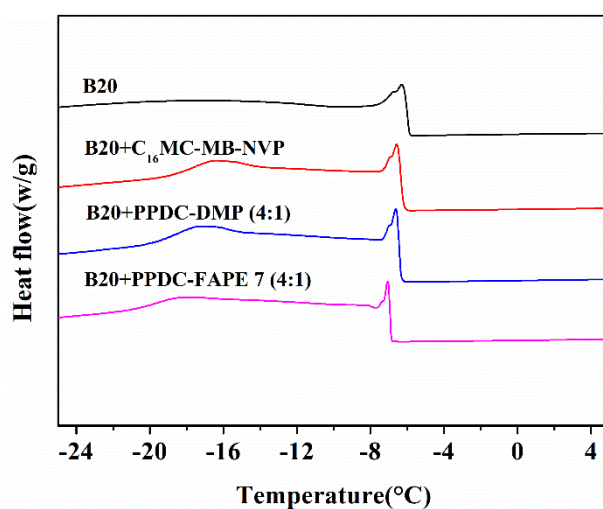


Fig 3 DSC traces of during cooling of biodiesel blends without and with PPDs in 2000 ppm

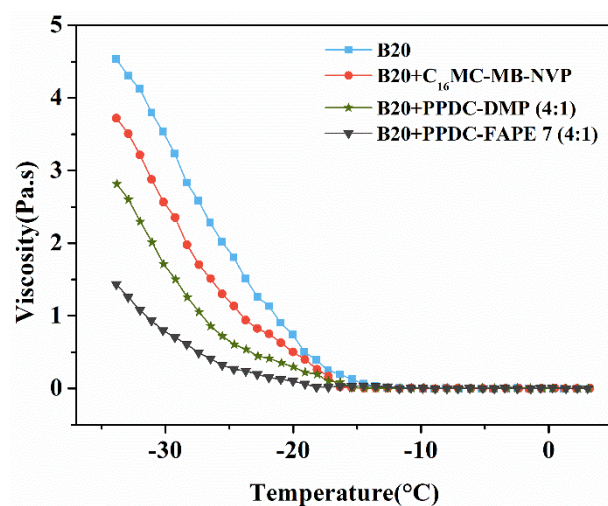


Fig 4 Viscosity-temperature curves of biodiesel blends with and without PPDs in a 2000 ppm concentration

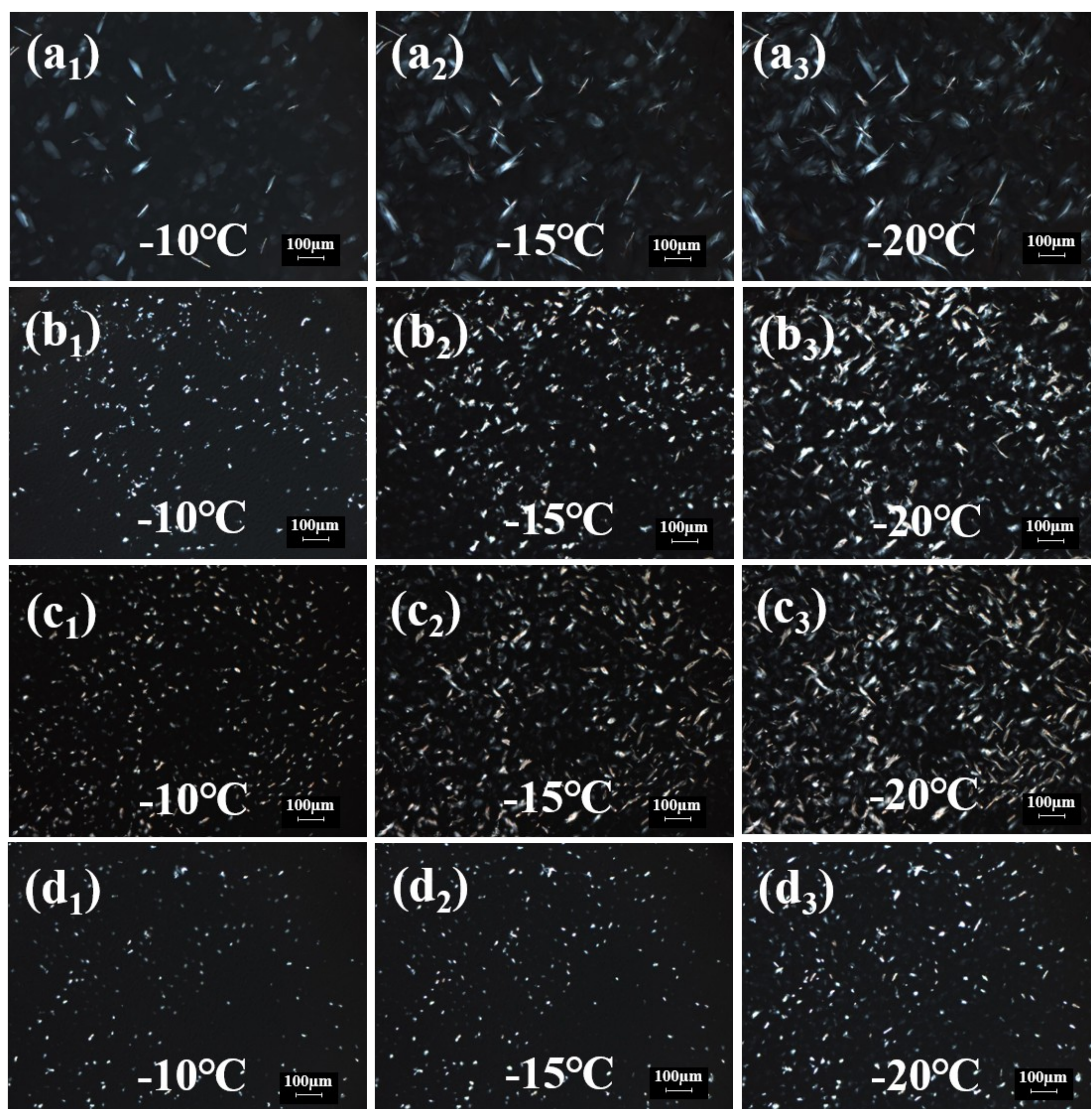


Fig 5 POM images of B20 (a₁, a₂, and a₃), B20 with 2000 ppm C₁₆MC-MB-NVP (b₁, b₂, and b₃), B20 with 2000 ppm PPDC-DMP (c₁, c₂, and c₃), and B20 with 2000 ppm PPDC-FAPE 7 (d₁, d₂, and d₃) at -10 °C, -15 °C, and -20 °C