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### Supplementary-Figure 1.

Crystal polymorphic forms of the interesterified samples measured at 25 °C in the absence of SBO and PKO

(A); in presence of SBO (B); in presence of PKO (C); in presence of SBO and PKO (D).

A









# Supplementary-Figure 2.

DSC non-isothermal crystallization thermograms of the interesterified samples in the absence of SBO and PKO (A); in presence of SBO (B); in presence of PKO (C); in presence of SBO and PKO (D).









## Supplementary-Figure 3.

SFC versus time profile during isothermal crystallization of the samples at 10 °C in the absence of SBO and PKO (A); in presence of SBO (B); in presence of PKO (C); in presence of SBO and PKO (D).

A









С

# Supplementary-Figure 4.

The isothermal crystallization kinetic equation fitting curve (*p*-NMR) of the samples in the absence of SBO and PKO (**A**); in presence of SBO (**B**); in presence of PKO (**C**); in presence of SBO and PKO (**D**).

A









С

### Supplementary-Figure 5.

The DSC-measured relative crystallinity of the samples under the corresponding isothermal crystallization temperatures in the absence of SBO and PKO (a, (A1, 23.80 °C; CIE-A1, 27.90 °C; B1, 19.30 °C; CIE-B1, 27.10 °C)); in presence of SBO (b, (A2, 23.00 °C; CIE-A2, 27.50 °C; B2, 24.00 °C; CIE-B2, 26.50 °C)); in presence of PKO (c, (A3, 22.80 °C; CIE-A3, 25.60 °C; B3, 23.00 °C; CIE-B3, 24.00 °C)); in presence of SBO and PKO (d, (A4, 24.00 °C; CIE-A4, 26.50 °C; B4, 18.00 °C; CIE-B4, 22.00 °C)).

a



b









# Supplementary-Figure 6.

The isothermal crystallization kinetic equation fitting curve (DSC) of the samples in the absence of SBO and PKO (A); in presence of SBO (B); in presence of PKO (C); in presence of SBO and PKO (D).

A







**Supplementary-Table 1.** Crystallization enthalpies, onset temperatures and transition temperatures of oil blends obtained post CIE <sup>ab</sup>

Sample	$T_o$ (°C)	$\Delta H (J/g)$	Transition temperature (°C)
CIE-A1	29.83±0.37	77.70±1.88	$1:28.11\pm0.40$
			2: 8.93±0.15
CIE-B1	28.80±0.29	74.64±0.91	1:27.75±0.74
			2: 5.96±0.34
CIE-A2	29.54±0.55	74.60±1.10	1:28.40±0.13
			2: 8.56±0.13
CIE-B2	29.06±0.46	69.82±1.29	1:27.53±0.32
			2: 7.89±0.10
CIE-A3	28.00±0.37	71.23±0.79	1:26.30±0.25
			2: 7.14±0.16
CIE-B3	28.11±0.42	71.40±0.98	1:26.89±0.22
			2: 6.37±0.14
CIE-A4	26.11±0.15	58.13±0.74	1:24.79±0.21
			2: 6.49±0.15
CIE-B4	23.33±0.44	68.09±0.59	1:22.32±0.23
			2: 2.25±0.05

<sup>a</sup>Values show the mean  $\pm$  standard deviation.

<sup>b</sup>Abbreviations used: A1, 30BT+20POL+50PMF; A2, 30BT+10POL+50PMF+10SBO; A3, 30BT+20POL+40PMF+10PKO; A4, 30BT+40PMF+10PKO+20SBO; B1, 80POL+20PST; B2, 40PST+25POL+20PMF+15SBO; B3, 25PST+35POL+30PMF+10PKO; B4, 30PST+25PMF+30PKO+15SBO.