

**Table 2.** Characteristics of separating polymer networks: molar mass  $M_w$ , intrinsic viscosity  $[\eta]$ , entanglement threshold  $C^*$ , concentration used and the corresponding blob size  $\xi_b$ .

Polymer tested	$M_w$ (g/mol)	$[\eta]$ (mL/g)	$C^*$ ( $10^{-3}$ g/mL)	$C$ used ( $10^{-3}$ g/mL)	$\xi_b$ at $C$ used (nm)
Pullulan	575 K	255	5.9	6	48
Dextran	1.5 – 2.8 M	550 – 906 <sup>a</sup>	1.65 – 2.7	5 / 15/ 20	55 / 24 / 19 <sup>d</sup>
Dextran SGO	50 M	9090	0.165	1 / 5	184 / 55 <sup>d</sup>
HEC	1.3 M	1990 <sup>b</sup>	0.75	0.8	164 <sup>e</sup>
PEO	1.5M	383 <sup>c</sup>	3.86	1.5	un-entangled
	2M	454 <sup>c</sup>	3.26	1.5	un-entangled
	5M	780 <sup>c</sup>	1.9	1.5	un-entangled
	8M	1029 <sup>c</sup>	1.45	1.5	174 <sup>f</sup>

<sup>a</sup>:  $[\eta] = 6.3 \times 10^{-3} M_w^{0.8}$ , <sup>b</sup>:  $[\eta] = 9.53 \times 10^{-3} M_w^{0.87}$ , <sup>c</sup>:  $[\eta] = 8.7 \times 10^{-2} M_w^{0.59}$ , <sup>d</sup>:  $\xi_b = 1.03 \times C^{-0.75}$ . <sup>e</sup>:  $\xi_b = 7.29 \times 10^{-1} C^{0.76}$ , <sup>f</sup>:  $\xi_b = 5.0 \times 10^{-1} C^{-0.90}$ . Units of  $[\eta]$ ,  $\xi_b$ ,  $C$  and  $M_w$  as indicated in Table 2. See ref [40].