

Analysis of startup shear flow data of linear polystyrene blends:

Is shear stress undershoot caused by transient shear banding?

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Relaxation Spectra of Polystyrene Melts at Temperature 150°C

Table SI.1

L185		L84	
g_i [Pa]	τ_i [s]	g_i [Pa]	τ_i [s]
4.448e+006	3.297e-004	2.837e+005	7.612e-003
1.022e+005	1.785e-002	3.383e+005	9.291e-004
5.001e+004	9.786e-002	8.665e+004	5.654e-001
4.293e+004	4.373e-001	9.206e+004	8.337e-002
5.043e+004	1.731e+000	3.930e+004	1.935e+000
4.865e+004	6.914e+000		
5.433e+004	1.942e+001		

Table SI.2

L200		L90	
g_i [Pa]	τ_i [s]	g_i [Pa]	τ_i [s]
8.367e+005	3.433e-003	8.957e+005	2.280e-003
5.843e+004	8.418e-002	1.170e+005	2.944e-002
4.804e+004	4.403e-001	9.017e+004	1.761e-001
5.557e+004	1.988e+000	1.098e+005	9.550e-001
5.646e+004	8.574e+000	4.218e+003	3.461e+000
4.842e+004	2.588e+001		

Relaxation Spectra of Binary Blends at Temperature 150°C

Table SI.3

L185/L84 – 94/06		L185/L84 – 50/50		L185/L84 – 27/73	
g_i [Pa]	τ_i [s]	g_i [Pa]	τ_i [s]	g_i [MPa]	τ_i [s]
6.295e+005	3.976e-003	7.336e+005	2.291e-003	6.362e+005	2.300e-003
5.852e+004	6.280e-002	9.641e+004	2.180e-002	8.726e+004	2.359e-002
4.355e+004	2.463e-001	6.263e+004	1.046e-001	6.267e+004	1.228e-001
4.790e+004	8.676e-001	5.961e+004	4.414e-001	5.953e+004	5.431e-001
5.368e+004	3.090e+000	6.414e+004	1.734e+000	5.310e+004	1.796e+000
5.572e+004	1.329e+001	2.351e+004	7.280e+000	1.134e+004	8.833e+000
		6.982e+003	1.823e+001		

Table SI.4

L200/L90 – 50/50		L200/L90 – 02/98	
g_i [Pa]	τ_i [s]	g_i [Pa]	τ_i [s]
5.041e+005	7.150e-003	1.577e+006	1.164e-003
7.821e+004	8.339e-002	1.408e+005	1.447e-002
6.688e+004	3.651e-001	8.330e+004	6.032e-002
9.071e+004	1.496e+000	7.841e+004	2.244e-001
2.693e+004	6.050e+000	9.352e+004	9.046e-001
1.460e+004	1.965e+001	1.740e+004	2.142e+000