

Supplementary Materials

Improvement of PLLA Ductility by Blending with PVDF: Localization of Compatibilizers and its GMA Content Dependency

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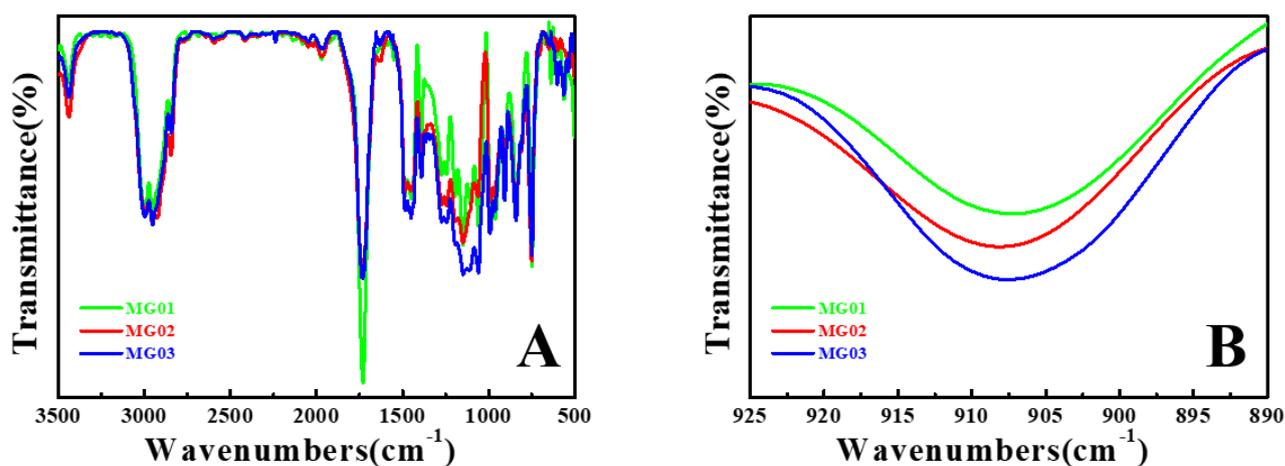


Figure S1. FTIR of three reactive compatibilizers. The curves were normalized according to peak at 2950cm^{-1} . Three kinds of RC named as MG01, MG02 and MG03 represent the GMA feed ratio of 10, 20 and 30 wt % during synthesis. The transmittances of epoxy group at 909cm^{-1} exhibit lower magnitudes (from MG01, MG02 to MG03), indicating the highest GMA content in MG03.

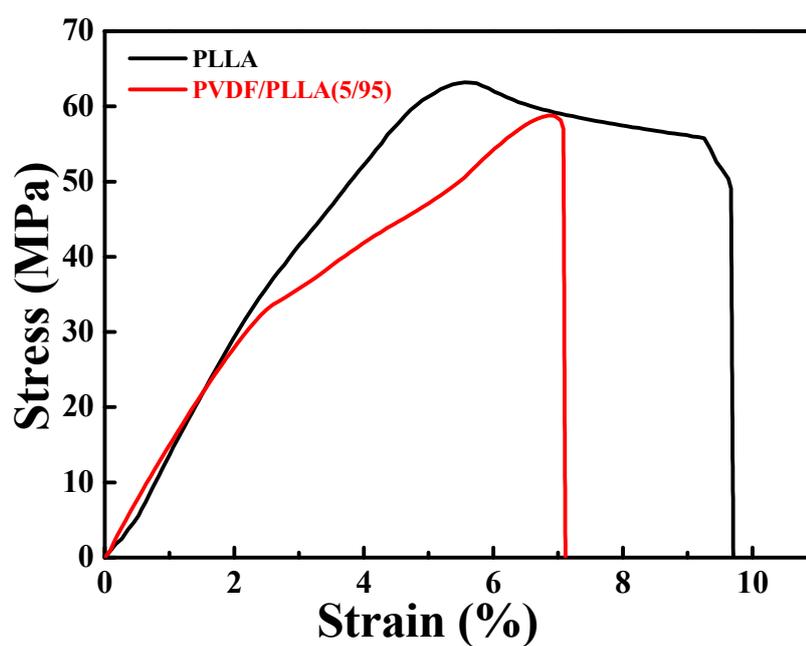


Figure S2. Strain-stress curves of neat PLLA and PLLA/PVDF blend (5/95, without compatibilizers).

Table S1. Particle size statistics of PVDF/PLLA blends with different compatibilizers and mixing times.

Sample	Mixing Time (min)	Partical Size (nm)
PVDF\PLLA\MG01 (5\95\3)	10	133 ± 45
	20	118 ± 21
	30	113 ± 15
	40	110 ± 20
PVDF/PLLA/MG02 (5/95/3)	10	123 ± 28
	20	105 ± 28
	30	104 ± 30
	40	116 ± 35
PVDF/PLLA/MG03 (5/95/3)	5	124 ± 24
	10	74 ± 17
	20	101 ± 19
	30	217 ± 72