## **Supporting Information for**

## Preparation of glass fabric/poly(L-lactide) composites by Thermoplastic Resin Transfer Molding

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Figure S1. RTM tank, mold 1 and mold 2 of the RTM apparatus

Run	Atmosphere	Time (min)	Conversion <sup>b</sup> (%)	Mn <sup>c</sup> (g.mol <sup>-1</sup> )	<i>Ð</i> с (g.mol <sup>-1</sup> )
2	Air	40	90	57 300	1.57

Table S1. Comparative synthesis of PLLA at the laboratory scale with Sn(Oct)2 under air or argon<sup>a</sup>

<sup>*a*</sup> Experimental conditions: mass of L-LA = 1g, [L-LA]/[Sn] = 2000, 185°C, <sup>b</sup> determined by <sup>1</sup>H NMR in CDCl<sub>3</sub>. <sup>*c*</sup> determined by SEC in THF at 40°C, RI detection,  $M_n$  corrected by the coefficient 0.58 for PLLA.



**Figure S2.** <sup>1</sup>H NMR spectrum (CDCl<sub>3</sub>) of poly(L-lactide) matrix in run 2 table S1. Conversion of the polymerization reaction was determined by integration of the C<u>H</u> signals relative to L-LA and PLLA at 5.03 and 5.15 ppm respectively.



**Figure S3.** SEC trace of polylactide matrix in run 15. Detectors: Light scattering (LS), Ultraviolet (UV), Refractive index (RI), Differential pressure (DP).



Figure S4. DSC curve of polylactide matrix in run 9 (1st heating)



Figure S5. DSC curve of polylactide matrix in run 10 (1st heating)



Figure S6. DSC curve of polylactide matrix in run 11 (1st heating)



Figure S7. DSC curve of polylactide matrix in run 12 (1st heating)



Figure S8. DSC curve of polylactide matrix in run 13 (1st heating)



Figure S9. DSC curve of polylactide matrix in run 14 (1st heating)



Figure S10. DSC curve of polylactide matrix in run 15 (1<sup>st</sup> heating)