

## SUPPORTING INFORMATION

### Supramolecular design of high-performance poly(L-lactide)/carbon nanotube nanocomposites: from melt-processing to rheological, morphological and electrical properties

Erica Manfredi,<sup>a</sup> Franck Meyer,<sup>\*a</sup> Pierre Verge,<sup>a</sup> Jean-Marie Raquez,<sup>a</sup> Jean-Michel Thomassin,<sup>b</sup> Michael Alexandre,<sup>b</sup> Bart Dervaux,<sup>c</sup> Filip DuPrez,<sup>c</sup> Pascal Van Der Voort,<sup>d</sup> Christine Jérôme,<sup>b</sup> Philippe Dubois<sup>\*a</sup>

<sup>a</sup> Prof. Dr. P. Dubois, E. Manfredi, Dr. P. Verge, Dr. J.-M. Raquez, Dr. F. Meyer  
Laboratory of Polymeric and Composite Materials, Center of Innovation and Research in Materials and Polymers (CIRMAP), University of Mons UMONS, Place du Parc 20, 7000 Mons, (Belgium)  
Fax: (+) 32(0)65.37.34.84

E-mail: [Franck.Meyer@umons.ac.be](mailto:Franck.Meyer@umons.ac.be) and [Philippe.Dubois@umons.ac.be](mailto:Philippe.Dubois@umons.ac.be)

<sup>b</sup> Dr J.-M. Thomassin, Dr. M. Alexandre, Pr. Dr. C. Jérôme

Center for Education and Research on Macromolecules (CERM), University of Liège (ULG), Sart-Tilman, B6A, 4000 Liège, (Belgium)

<sup>c</sup> Prof. Dr. F. Du Prez, Dr. B. Dervaux

Ghent University, Krijgslaan 281 S4 bis, 9000 Gent, Belgium

<sup>d</sup> Prof. Dr. P. Van Der Voort

Centre for Ordered Materials, Organometallics and Catalysis (COMOC), Department of Inorganic and Physical Chemistry, Ghent University, Krijgslaan 281 S3, 9000 Gent, Belgium

Table 1S. Masterbatch compositions with and without ImPLLA as surfactant

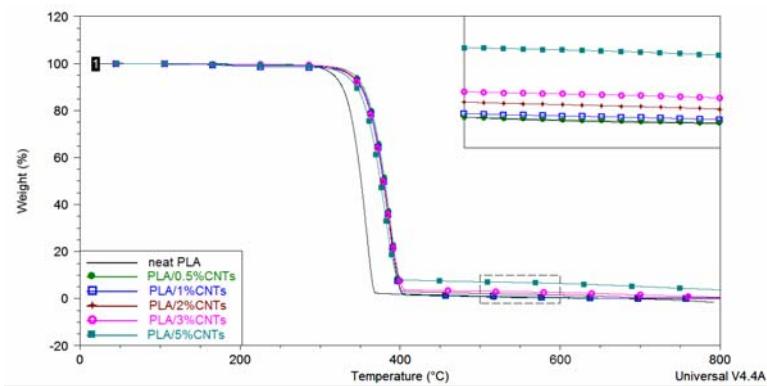
Sample	CNTs (wt%)	ImPLLA (wt%)	PLLA (wt%)
PLLA/2.5%CNTs	2.5	0	97.5
PLLA/5%CNTs	5	0	95
PLLA/10%CNTs	10	0	90
PLLA/15%CNTs	15	0	85
PLLA/25%CNTs	25	0	75
PLLA/2.5%CNTs/60%ImPLLA	2.5	60	37.5
PLLA/5%CNTs/60%ImPLLA	5	60	35
PLLA/10%CNTs/60%ImPLLA	10	60	30
PLLA/15%CNTs/60%ImPLLA	15	60	25
PLLA/25%CNTs/60%ImPLLA	25	60	15

Figure 1S. Dispersion tests of CNTs in chloroform with ImPLLA before and after counteranion exchange



Figure 2S TGA analyses performed on samples a) without ImPLLA surfactant and b) with 12 wt% ImPLLA surfactant.

(a)



(b)

