

Novel compatibilized nylon-based ternary blends with polypropylene and poly(lactic acid): Morphology evolution and rheological behaviour in ternary blends

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SUPPORTING INFORMATION

Supporting table:

Table S1: Heating profile for reactive extrusion.

Zone	1 (Feeding)	2	3	4	5	6	7	8	9	10	11	12 (Die)
Temperature (°C)	220	230	240	250	250	250	250	250	250	240	230	220

Supporting figure:

PA6	PLA	PP	MAPP	Tensile strength (MPa)	Young's modulus (GPa)	Yield elongation (%)	Break elongation (%)	Flexural strength (MPa)	Flexural modulus (GPa)	Impact strength (J/m)
80	10	10	0	70.9 ± 0.5	2.67 ± 0.10	4.0 ± 0.1	48.3 ± 6.5	98.5 ± 1.3	2.64 ± 0.03	61.41 ± 2.18
80	10	7.5	2.5	73.2 ± 0.4	2.82 ± 0.03	3.8 ± 0.1	64.1 ± 11.8	100.5 ± 1.0	2.71 ± 0.03	63.637 ± 3.85
80	10	5	5	73.2 ± 0.6	2.77 ± 0.04	3.9 ± 0.1	100.3 ± 47.1	99.8 ± 0.8	2.68 ± 0.01	63.436 ± 2.84
80	10	2.5	7.5	72.3 ± 0.3	2.74 ± 0.05	3.9 ± 0.0	39.0 ± 0.0	99.5 ± 0.5	2.64 ± 0.02	58.22 ± 4.612

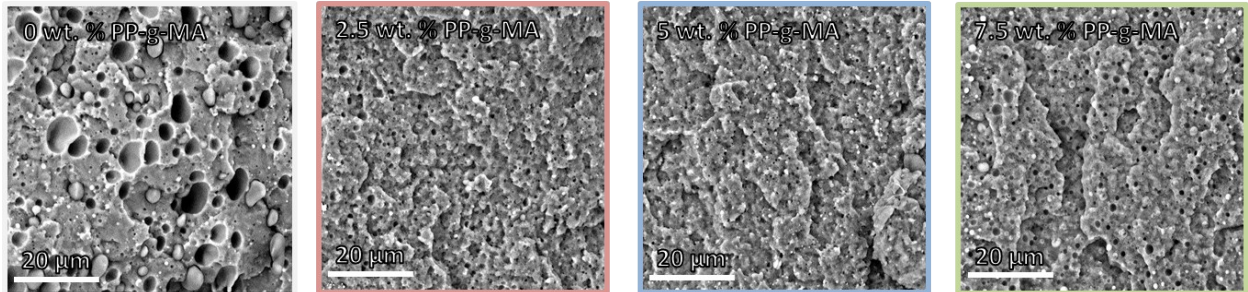


Figure S1: Mechanical properties and SEM micrographs at 4000x magnification of PA6/PLA/PP/MAPP ternary blends compatibilized with 2.5, 5 and 7.5 wt. % PP-g-MA