

Supporting Information

Influence of Ammonium Polyphosphate / Lignin Ratio on Thermal and Fire Behavior of Biobased Thermoplastic: The Case of Polyamide 11

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The Melt Flow Tester from Thermo Haake (Thermo Fisher Scientific; Waltham, MA, USA) was used for Melt Flow Index (MFI) measurement to analyze spinnability and determine the spinning temperature condition. According to the standard ASTM D1238 [1], the piston and the dried material (7 g per measurement) were pre-heated for 4 and 3 min, respectively. This procedure was carried out twice for each blend at 200 °C under a load of 2.16 kg.

Table S1. Melting Flow Index for PA and its blends.

Samples	MFI (200 °C, 2.16 kg)
PA ₁₀₀	23.2 ± 0.5
PA ₈₀ -AP ₂₀	5.3 ± 0.8
PA ₈₀ -KL ₂₀	9.0 ± 1.0
PA ₈₀ -KL ₀₅ -AP ₁₅	5.6 ± 0.8
PA ₈₀ -KL ₀₇ -AP ₁₃	6.1 ± 0.9
PA ₈₀ -KL ₁₀ -AP ₁₀	6.7 ± 0.9

Reference

1. ASTM. *ASTM D1238-13: Standard test method for melt flow rates of thermoplastics by extrusion plastomete*. ASTM International: West Conshohocken, PA, USA, 2013.