Supporting information

Structure and properties of a newly synthesized semi-aromatic polyamide thermoplastic elastomer

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Table S1 Quantity of raw materials for synthesizing prepolymer samples used in this study

Prepolymer	TPA (mol)	IPA (mol)	DDA (mol)	H_2O (g)
Pre-PA12T/12I-0	0-	0.176	0.126	12.8
Pre-PA12T/12I-1	0.0176	0.1584	0.126	12.8
Pre-PA12T/12I-2	0.0352	0.1408	0.126	12.8
Pre-PA12T/12I-3	0.0528	0.1232	0.126	12.8
Pre-PA12T/12I-4	0.0704	0.1056	0.126	12.8
Pre-PA12T/12I-5	0.0880	0.0880	0.126	12.8
Pre-PA12T/12I-6	0.1056	0.0704	0.126	12.8

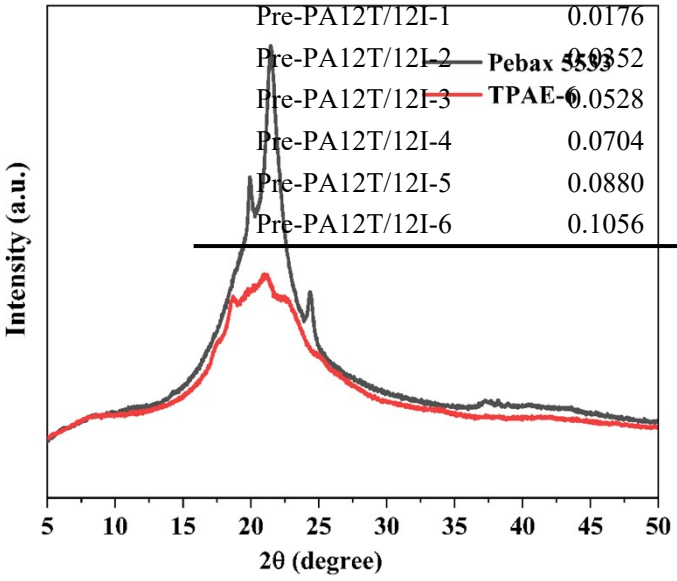

Figure S1. WAXD patterns of the TPAE-6 and Pebax 5533 at ambient temperatures

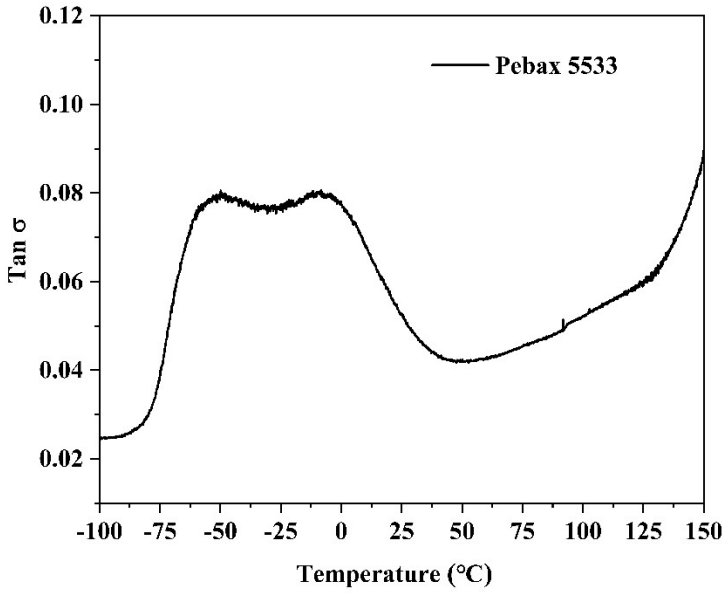

Figure S2. Loss factor (tan δ) for Pebax 5533.