Branched Polystyrenes from a Suspension "Strathclyde" Polymerization Using a Vulcanization Accelerator as Chain Transfer Agent

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Fig. S1 The RI-GPC traces of 1% (a) and 2% (b) series BPS. The subscripts denote the reagent dosages in mmol.



Fig. S2 The ¹H NMR spectrum of B6-8. There is no peak in orange part that meaning no vinyl group in polymers. The signals at 6.3-7.2 ppm in polymers are protons from styrene residues. The peak of TMDS in the polymers is at 3.3 ppm which is attributed to the protons in the methyl group. The signal peaks at 4.1 is attributed to impurities, which have been removed after further purification of the polymers.

The formula for calculating the the ratio of St/TMDS is as follows:

$$St/TMDS = \frac{Integrals of a}{5} / \frac{Integrals of b}{12}$$



Fig. S3 Rheological date collected from melt rheology test with different branched polymer B4, B5, B7, B8.