18. The polyolefin-polybutadiene block-copolymer of any one of claims 1 to 8, wherein the reactions of the fPB, the VTM, and optionally the XL to form the reaction product are conducted within the temperature range of from 50°C to 110°C.

19. The polyolefin-polybutadiene block-copolymer of claim 18, wherein the reactions of the fPB, the VTM, and optionally the XL to form the reaction product are conducted in a solvent selected from the group consisting of toluene, xylene, chlorobenzene, trichlorobenzene, and mixtures or combinations thereof.