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Entanglement in miscible blends HIROSHI WATANABE, ICR Kyoto University — The entanglement length L_e of polymer chains (corresponding to the entanglement molecular weight M_e) is not an intrinsic material parameter but changes with the interaction with surrounding chains. For miscible blends of *cis*-polyisoprene (PI) and poly(*tert*-butyl styrene) (PtBS), changes of L_e on blending was examined. It turned out that the Le averaged over the number fractions of the Kuhn segments of the components (PI and PtBS) satisfactorily describes the viscoelastic behavior of pseudo-monodisperse blends in which the terminal relaxation time is the same for PI and PtBS.

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