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Rheology-morphology relationships in polytrimethylene terepthalate/liquid crystalline polymer blends PENWISA PISITSAK, RATHANAWAN MAGARAPHAN, The Petroleum and Petrochemical College, Chulalongkorn University — The use of thermotropic liquid crystalline polymers as the minor phase of polymer blends has attracted considerable attention because these blends show unique physical, mechanical, rheological and thermal properties. In this work, the reological behaviors of blends of polytrimethylene terepthalate and the liquid crystalline polymer Vectra A950 were characterized with capillary rheometry. Morphology of the rheometer extrudates observed with scanning electron microscopy was compared with the predictions from rheological results. Also, the miscibility of the blends as a result of transeterification reactions was investigated by differential scanning calorimetry (DSC).

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