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## THREE-DIMENSIONAL SIMULATIONS OF A CONSERVED BINARY MIXTURE USING MODEL B

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We present three-dimensional numerical simulations of a binary mixture with a nematic liquid crystal and flexible polymer phases. The model is based on the Ginzburg-Landau free energy and is defined by coupling the Cahn-Hilliard equation, which incorporates the nematic elastic energy and guide spinodal decomposition, with the de Gennes-Prost equation, which governs the crystal's director field. The main goal is to analyze how the orientational distortion of the director field induced by interfacial anchoring affects both the morphology and the ordering kinetics of the binary mixture in three dimensions.