

**Abstract:** Films of Liquitex gloss medium, an acrylic dispersion polymer product, have been reported to become turbid slowly due to the formation of microscopic crystalline inclusions. This report describes the analysis of the melting point, morphology, solubility and infrared absorption spectrum of these included crystals and of the crystalline solids extracted from the acrylic films with water. The results of these analyses indicate that the crystals that cause turbidity in these acrylic films are poly(ethane-1,2-diol) [poly(ethylene glycol)] type compounds. A mechanism by which these crystals form in the films is described, and the conditions that favor crystallization are identified. These parameters suggest avenues which might be explored in seeking appropriate treatments to prevent or remedy the turbidity in acrylic media films.