

276c Modelling the Solubility of Chitosan in Supercritical Carbon Dioxide through Saft

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Chitosan a second most abundant polymer after cellulose is obtained through hydrolysis of chitin. The use of chitosan as an excipient in pharmaceutical applications is still under developed mainly due to limited knowledge of its properties. We present an approach to predict the solubility of chitosan in supercritical carbon dioxide. We used SAFT based equation of state to model the molecular associations of chitosan molecule. We used an interaction parameter to model the chitosan-supercritical carbon dioxide behavior. The model predicts our high pressure cloud point data.