Process Parameters and Morphology in Itraconazole Micro and Submicro Particles Generation by Supercritical Antisolvent Precipitation

유진희, 김기환, 류 정, 김문선, 이용철* 성균관대학교 화학공학과 (yclee@yurim.skku.ac.kr*)

The supercritical antisolvent precipitation (SAS) process has been frequently applied to pharmaceutical compounds due to its potential capacity to control the particle size distribution, ease separation, and recovery of solvent and antisolvent. Therefore, this experiment was performed through the SAS method, which liquid solutions of itraconazole were sprayed using supercritical ${\rm CO}_2$ as a antisolvent. Some different types of microparticles were obtained with various SAS precipitation conditions of itraconazole solution such as temperature, pressure, and solute concentration.