

### Preparation of Arbutin Microparticles by Using the SAS Process

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In this work, micro-sized arbutin particles, which is well known to be an effective material for skin lightening agent, were prepared by means of the Supercritical Antisolvent(SAS) process with CO<sub>2</sub>. With ethanol as the solvent, effects of the operating variables such as temperature (308.15~323.15 K), pressure(90~130 bar), solute concentration(0.5~1.5 wt%), and the injection velocity of the solution(4~12ml/min) on the size and morphology of the resulting particles were thoroughly observed. The higher solute concentration, temperature and pressure led to the larger particles. However, the injection velocity of the solution and pressure did not show significant effects on the resulting particle size.