

## Measurement and Correlation of Drug Solubility in Supercritical Fluid

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Supercritical-fluid (SCF) technology has received much attention as an alternative solution for many difficult separation problems, mainly because of its enhanced transport properties and solubilizing power, and ease of solvent recovery. Recently experimental data for equilibrium solubility of solid including biochemical substances in supercritical fluid have measured.

We measured drug solubility (Iodopropynyl butyl carbamate, IPBC) in supercritical carbon dioxide at 40, 50, 60 °C using variable volume view cell. IPBC is a biocide for pharmaceutical, cosmetic, food, and wood industries. We correlated IPBC solubility in supercritical carbon dioxide with cubic equation of state and lattice fluid equation of state.