

### Solubility of Carnauba Wax in Cosolvent -Loaded Supercritical Carbon Dioxide

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Carnauba wax can be removed from the green body during debinding process with supercritical carbon dioxide. Removal from the green body with using supercritical CO<sub>2</sub> gives less time and lower temperature than other methods such as solvent, thermal and catalytic debinding process. In this research, effects of pressure, temperature, and co-solvents on the solubility of carnauba wax was investigated in supercritical CO<sub>2</sub>. The solubility of carnauba wax was measured in supercritical CO<sub>2</sub> with and without cosolvent at temperatures above room temperature and at high pressures. Two methods are used in this research, batch method and flow method. Solubility increased when the flow method was used, especially when chloroform, ethanol, acetone, or n-hexane was used as a cosolvent.

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