Phase Behavior of Amine Compound with Fluorosurfactant in Supercritical Carbon Dioxide

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Cloud point of the Amine Compound with Fluorosurfactant in Supercritical Carbon Dioxide has been investigated. The amine Compound was used as additives for the supercritical carbon dioxide, because only CO_2 could not remove completely photo resist used for semiconductor manufacturing process. The cloud point is a necessary factor for Supercritical CO_2 Resist Removal (SCORR) process. The cloud points were measured using a high pressure variable-volume view cell. All systems exhibited a lower critical solution temperature phase behavior and became one-phase in carbon dioxide in the range of 313.15 to 353.15 K at less than 40 MPa.