

**Solubility of Thiophene in Carbon Dioxide– N,N-Dimethylformamide at
Temperatures from 313 to 363 K**

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The extraction of thiophene from gasoline is very important in the refining industry. As a first step, knowledge of the solubility behavior of thiophene in supercritical solvents is critical for the development of new separation processes. In this work, a static analytic apparatus was used to determine experimental solubilities of thiophene in carbon dioxide– N,N-dimethylformamide from 313 to 353 K.

The experimental data are represented using the Peng-Robinson equation of state with Wong-Sandler type mixing rules. In this work, our experimental data are well represented by the model.