

Effect of Cu(I) for Isoprene Separations by Adsorption via π -Complexation

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Olefin/paraffin separation is one of the most important processes in the petrochemical industry. The conventional method for separating olefin/paraffin mixture is highly energy-intensive and low-temperature distillation. A process based upon reversible chemical complexation, which employs a mass-separating agent rather than an energy-separating agent, presents an attractive alternative to distillation. Use of such a reversible olefin complexation process could substantially reduce the capital costs and energy requirements of olefin/paraffin separations. We investigated liquid-liquid separation system using Cu⁺ or Ag⁺ as a selective separating agent.