

RESEARCH PAPERS

2-萘磺酸/硫酸在弱碱性树脂上的吸附平衡研究

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摘要 Experiments for single and bisolute competitive adsorption were carried out to investigate the adsorption behavior of β -naphthalenesulfonic acid (NSA) and sulfuric acid from their solution at 25 °C onto weakly basic resin D301R. Adsorption affinity of sulfuric acid on D301R was found to be much higher than that of NSA. The data of single-solute adsorption were fitted to the Langmuir model and the Freundlich adsorption model. The ideal adsorbed solution theory (IAST) coupled with the single-solute adsorption models were used to predict the bisolute competitive adsorption equilibria. The IAST coupled with the Langmuir and the Freundlich model for sulfuric acid and NSA, respectively, yields the favorable representation of the bisolute competitive adsorption behavior.

关键词 [\$\beta\$ -naphthalenesulfonic acid](#) [adsorption](#) [weakly basic resin](#)

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Adsorption of β -Naphthalenesulfonic Acid/Sulfuric Acid from Their Solution by Weakly Basic Resin

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Key words [\$\beta\$ -naphthalenesulfonic acid](#); [adsorption](#); [weakly basic resin](#)

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