

Removal of Phenol and B- Naphthol from Aqueous Solutions Using Cashew Nut Shell Charcoal

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ABSTRACT

The present study was aimed at removing phenol and β - naphthol using cashew nut shell charcoal. The effect of adsorbent dosage, contact time, heating and initial concentration of the kinetics of adsorption was studied. It was shown that phenol and β - naphthol removal is increased with increasing adsorbent dosage. The rate of adsorption increases with increase in contact time until equilibrium is reached after which there will be no much variation in the rate of adsorption. In the case of increasing temperature, here also the removal of phenol and β - naphthol increased. The adsorption data fitted well with Freundlich adsorption isotherm.

Key Words: Adsorption, Phenol, β - naphthol, Cashew nut shell charcoal, Freundlich adsorption isotherm