

Adsorption Studies of 2-Picoline from *Taxus chinensis* by Sylopute

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Batch experiment studies were carried out on the adsorption of the major tar compound, 2-picoline, derived from the plant cell cultures of *Taxus chinensis*, using Sylopute while varying parameters such as initial concentration, contact time and adsorption temperature. The experimental data were fitted to the Langmuir, Freundlich, Temkin and Dubinin-Radushkevich isotherm models. The kinetic data were then fitted using the pseudo-first-order, pseudo-second-order and intraparticle diffusion models. Thermodynamic parameters, such as activation energy (E_a), standard enthalpy (ΔH°), standard entropy (ΔS°) and standard Gibbs free energy (ΔG°) change, were also investigated.

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