

# Turkish Journal of Chemistry

Turkish Journal

A Study of the Adsorption of Phenol by Activated Carbon from Aqueous Solutions

of

Chemistry

Riaz QADEER

Pakistan Atomic Energy Commission, P.O. Box No. 1331,

Islamabad-PAKISTAN

Abdul Hameed REHAN

Pakistan Institute of Nuclear Science and Technology,

P.O. Box 1356, Islamabad-PAKISTAN

 [Keywords](#)  
 [Authors](#)



**Abstract:** A commercial active carbon was tested as an adsorbent for the removal of phenol from aqueous solutions. The optimum conditions for maximum adsorption in terms of shaking time, amount of the adsorbent, and concentration of the adsorbate were identified. The adsorption data fitted the Langmuir isotherm equation in the whole range of concentrations studied. The adsorption of picric acid, pyrogallol and salicylic acid at selected conditions for phenol was also studied. Elution studies to recover the adsorbed phenol from active carbon were performed with distilled water, NaOH and HCl solutions.

[chem@tubitak.gov.tr](mailto:chem@tubitak.gov.tr)

**Key Words:** Phenol, active carbon, adsorption and aqueous solutions

[Scientific Journals Home](#)  
[Page](#)

---

Turk. J. Chem., **26**, (2002), 357-362.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Chem., vol.26, iss.3.](#)