

Turkish Journal of Chemistry

Turkish Journal

of

Chemistry

The Adsorption Isotherms of the Bleaching of Sunflower-Seed Oil

Hüseyin TOPALLAR

Trakya University, Faculty of Sciences and Letters

Department of Chemistry, 22030 Edirne-TURKEY

Abstract: In this study, the absorbance measurements were taken for the bleaching of sunflower-seed oil with wt. 0.3, 0.5, 0.7 and 0.9 % of clay at 60, 70, 80 and 90°C. Bentonite EY-09 was used as the bleaching clay. Since the heat evolved during adsorption ($0.33-1.07 \text{ kJ mol}^{-1}$) was less than 20 kJ mol^{-1} , the forces between the adsorbent and adsorbate appear to be van der Waals forces, and this type of adsorption is physical or van der Waals adsorption. Thus, it was seen that the Freundlich equation was more applicable than the Langmuir equation to the experimental adsorption isotherms for the bleaching of sunflower-seed oil with Bentonite EY-09.

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



Key Words: Adsorption isotherm, bleaching, Freundlich equation, Langmuir equation, sunflower-seed oil.

chem@tubitak.gov.tr

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

Turk. J. Chem., **22**, (1998), 143-148.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Chem., vol.22, iss.2.](#)