

عنوان مقاله:

Experimental study on removal of MTBE from aqueous solution by exfoliated graphite

محل انتشار:

اولین کنفرانس بین المللی تصفیه فاضلاب و بازیافت آب، فناوری ها و یافته های نو (سال: 1388)

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خلاصه مقاله:

This paper presents the results of study on the removal of methyl tert-butyl ether (MTBE) from aqueous solution containing 0.00143(gr/mL) of MTBE by using exfoliated graphite (EG) as adsorbent. Experiments were carried out in batch mode and the effects of several affecting factors on the removal of MTBE were evaluated. Also, the effect of ultrasound irradiation on adsorption of MTBE was investigated. Results showed an efficient removal of MTBE from aqueous solution could be achieved by implementing ultrasound facilitated adsorption process using EG. In controlled conditions maximum removal percentage of 97% was achieved for MTBE and it was found that applying ultrasonic irradiation had a considerable positive effect on the removal of MTBE from its aqueous solution.

کلمات کلیدی:

Adsorption, Exfoliated Graphite, MTBE, Ph, Ultrasound Irradiation

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