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ION EXCHANGE OF COBALT IONS BY ETS-4 AND ETS-10 MICROPOROUS TITANOSILICATES

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Abstract

Ion exchange experiments were carried out for the removal from aqueous solution of cobalt ions by an Engelhard Titanium Silicates -4 and 10 synthesized from alkaline gels. Selectivity factors were estimated by the construction of ion exchange and Langmuir isotherms and determination of thermodynamic values. It is shown that ETS-10 have a better affinity for Co uptake.

Keywords: ion exchange, cobalt, titanosilicates, ETS-4, ETS-10

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