IODIDE IONS SORPTION ON POLYMER AV-17(Cl) AND SORBENT AV-17(Bi)

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Abstract. The iodide ions sorption from solutions of KI and KI in excess of KCl has been investigated. The strongly basic anion exchangers AV-17 in Cl form and Varion AD in NO₃ form were used as sorbents. Also AV-17 polymer modified with Bi(III)-containing compounds were used. The sorption was performed in static and dynamic conditions. Isotherms are approximated with BET sorption model. The sorption value of iodide ions in the KI solutions with KCl in excess is quite high. It was established that sorption of iodide ions in the form of polyiodide occurs both as a result of anion exchange and as a result of chemisorption.

Keywords: strongly basic anion exchanger, iodide ions, sorption, Bi(III) compounds.