



THE STUDY OF IRON (II) REMOVAL FROM 34% CALCIUM CHLORIDE SOLUTIONS BY CHELATING RESIN PUROLITE S930

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Abstract

In this study Purolite S930-sodium and hydrogen forms of resin are used to remove iron(II) ions from 34% CaCl₂ solutions. This work presents the influence of experimental conditions on the iron (II) ions removal from 34% CaCl₂ solutions using chelating ion exchange resin Purolite S930 and shows that the resin Purolite S930-sodium form is an effective sorbent to remove iron(II) from CaCl₂ solution. In batch experiment the influence of initial solution pH, initial metal concentration, contact time, temperature, ionic form of the resin and also, resin dose was studied. For Purolite S930-sodium form resin the percent of Iron (II) removal has a maximum at pH 5.0, increases with the increasing of the resin dose, the contact time and temperature and it decreases with the increasing of initial iron(II) concentration of the solution.

Key words: calcium chloride, ion exchange, iron, purification, Purolite S930

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