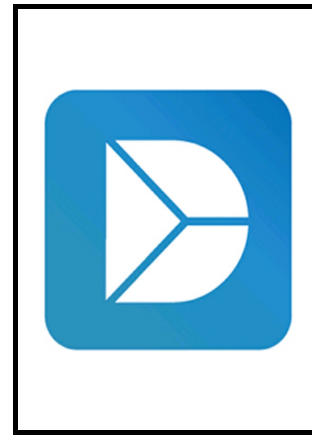


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Data on the removal of turbidity from aqueous solutions using polyaluminum chloride

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Abstract

Polyaluminum chloride (PAC) is claimed to be superior to conventional coagulants because of higher removal of particulate and/or organic matters as well as inherent advantages of lower alkalinity consumption and lesser sludge production. 1000 mL of the reaction mixture was examined using parameters, including PAC dose (5–10 mg/L), pH (4-9), and turbidity (1.9 NTU). The content was stirred at 120 rpm for 1 min. Thereafter, the turbidity of water samples was measured using a P2100 turbidimeter. Data indicated that the maximum removal efficiency of turbidity (97.74 %) obtained under the PAC doses of 4 and 10, and the pH of 8. There is not a significant relationship between the different dosages of PAC (P-value>0.05), but the influence of pH on the removal of turbidity was significant (P-value<0.05). Based on the dataset, the removal efficiency of turbidity was depended on PAC and pH.

Keywords : Polyaluminum chloride, Turbidity, Coagulation, Flocculation

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