

Non-aqueous titrations: Solvent effect on potentiometric titrations of some amines

Feray AYDOGAN, Sevgi KOCAOBA*, and Hüseyin AFSAR

Yildiz Technical University, Faculty of Art & Science, Department of Chemistry, Davutpaşa Cad. No:127, 34210- Davutpaşa, İstanbul, Turkey.

Abstract Potentiometric titrations of some secondary amines; 2-aminoheptane, 2-aminoethylpyrdine and cyclohexylamine were carried out with hydrochloric acid in toluene solvent. The same titrations were done with hydrochloric acid in methanol solvent to show the effect of amphiprotic solvent in the titrations with hydrochloric acid. For each weak base, an S-shaped potentiometric titration curve was obtained. As a result, toluene, which is an aprotic inert solvent, is a suitable solvent for titration of some weak bases by potentiometrically.

Keywords: non- aqueous titrations, toluene, hydrochloric acid, 2-aminoheptane, 2-aminoethylpyrdine, cyclohexylamine
