
Tropolone as an Extractive Indicator in the EDTA Titration of Cobalt

H. C. Mehra and G. R. Chhatwal

Dept. of Chemistry, M. M. H. College, Ghaziabad, India

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Tropolon als Extraktionsindikator bei der Titration
von Kobalt mit ÄDTA

Best. von Kobalt mit Tropolon; Volumetrie; ÄDTA

Various indicators have already been employed for the complexometric titration of cobalt. Yet, they all suffer from many difficulties. It has now been found that

the application of tropolone offers satisfactory results. A highly sensitive yellow complex is formed, which is extractable into chloroform. Accurate values are obtained in the pH range 5.0–8.5. Two drops of 0.1 M indicator solution in chloroform are sufficient for sharp colour change. A drop of 0.1 M pyridine solution makes this change even clearer. Various commonly occurring ions do not cause any interferences. Interferences due to Be and Al can be eliminated by masking with fluoride, lead should be precipitated as sulphate. Efforts to eliminate the interferences by Cu, Cd, Fe, Ni, Sn, Zn and Th were unsuccessful.

Dr. H. C. Mehra, Dept. of Chemistry, M.M.H. College, Ghaziabad, U.P., India