

The acid-base properties and the complexation of tributyl [aminotris(methylenephosphonic acid)] in aqueous solution

Shurygin I., Nasyrova M., Muslimov E., Cherkasov R., Garifzyanov A.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2016 Taylor & Francis Group, LLC. The acid-base and complexing properties of tributyl [aminotris(methylenephosphonic acid)] (H₃L) with divalent metals were investigated in aqueous solution via the potentiometric titration method. The formation of 1:1 species partially protonated [MH₂L] and totally deprotonated [ML⁻] as well as hydroxo species [M(OH)L₂⁻] has been established.

<http://dx.doi.org/10.1080/10426507.2016.1213253>

Keywords

Acid-base properties, aminophosphonates, complexation, stability constants