

Surface Tension Measurements of Dilute Aqueous Binary Solutions of KCl and KBr at 298.15 K

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Surface tension data are important in processes such as lixiviation, and other industrial applications such as painting, welding, electroplating, lubrication and pesticides. Surface tension measurements of dilute aqueous binary solutions of KCl and KBr were carried out at 298.15 K. Measurements were carried out in an apparatus based on the DuNouy ring method. We used two different types of deionized water having different conductivity to prepare the solutions and we found that there was significant influence of the water type used to perform surface tension measurements. Our results were compared with those reported by Ali et al. [1] and with those reported by Jones and Ray [2]. We would not be able to reproduce measurements reported in references 1 and 2, however they used doubly distilled water to perform measurements. This issue is discussed in the present work.

[1] Ali, K.; Anwar-ul-Haq; Bilal, S.; Siddiqi, S. *Colloids and Surfaces A: Physicochem. Eng. Aspects*, 2006, 272, 150-110.

[2] Jones G.; Ray, W. A. *J. Am. Chem. Soc.* 59, 37, 187-198.