

## A Simple Reversed-Phase High Performance Liquid Chromatographic Method for the Determination of Conventional Ionic Liquids

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Ionic liquids (ILs) have received considerable attention in basic research in recent years and are drawing great interest as a “greener” replacement for volatile organic solvents. The increasing use of ILs results in the potential demand for their analytical methods. Therefore, the present work proposed to study the behavior of different kinds of conventional ILs (e.g. 1-butyl-3-methylimidazolium, 1-butyl-3-methylpyridinium, 1-butyl-1-methylpyrrolidinium, tetrabutylammonium, and tetrabutylphosphonium with bromide as a counteranion) in a classical reversed-phased high performance liquid chromatographic system. The mobile phase is water-rich acetonitrile solution with phosphoric acid as a buffer. The obtained results show that it is possible to analyze the aforementioned ILs under isocratic elution with Ultra-Violet (UV) detection. This observation may be found to be useful in many processes involved the determination of ILs, however, further studies are necessary to provide a more in depth analysis of these highly promising neoteric chemicals.