

### Synthesis & Catalysis-Kit

Among the various applications the use of [ionic liquids in synthesis and catalysis](#) is surely the scientific field that was studied most intensively over the past 10 years. Today there are many examples in scientific literature demonstrating that Ionic liquids enhance the reactivity and/or selectivity of a number of processes.<sup>[1]</sup>



The most important physical and chemical properties of ionic liquids for their use in synthesis and catalysis are

- tunable miscibility with many starting materials and products for an easy separation,
- tunable hydrophobicity/hydrophilicity,
- a negligible vapor pressure,
- chemical and thermal stability.

Based on our database and the overview of the reactions that show better yields and/or selectivity, if performed in ionic liquids, we have selected the following ionic liquids for Synthesis & Catalysis kit:

- **1-Butyl-3-methyl-imidazolium tetrafluoroborate**, [IL-0012-HP](#)
- **1-Butyl-3-methyl-imidazolium hexafluorophosphate**, [IL-0011-HP](#)
- **1-Butyl-3-methyl-imidazolium trifluoromethanesulfonate**, [IL-0013-HP](#)
- **1-Butyl-3-methyl-imidazolium bis(trifluoromethylsulfonyl)imide**, [IL-0029-HP](#)
- **1-Butyl-3-methyl-imidazolium hydrogensulfate**, [IL-0060-HP](#)

If other ionic liquids are desired, please have also a look at [„myKit“](#).

[1] *Ionic Liquids in Synthesis*, Second Edition, P. Wasserscheid and T. Welton (Eds.), 2008, Wiley VCH Verlags GmbH & Co. KGaA, Weinheim.