

Nano-Kits



Over the past years, ionic liquids (IL) have gained an increasing interest in the synthesis of inorganic materials and in particular in the synthesis of [nanoscaled materials](#). The most important properties of ILs are

- the weak or non-coordinating properties of the anions,
- the polarity and surface tension,
- the possibility of supramolecular structures.

The template-effect often plays a key-role in the control of the size, the size-distribution and the shape of nano-materials. It was successfully demonstrated in numerous examples that ILs have a significant influence on the morphology of nanomaterials, if they were used as structure-directing media for the synthesis. IOLITEC offers two different nano-kits, each containing 5 different ILs:

Nano-Kit I: („Variation anion & chain length“)

- **1-Butyl-3-methylimidazolium tetrafluoroborate**, [IL-0012-HP](#)
- **1-Methyl-3-octylimidazolium tetrafluoroborate**, [IL-0021-HP](#)
- **1-Butyl-3-methyl-imidazolium hexafluorophosphate**, [IL-0011-HP](#)
- **1-Methyl-3-octylimidazolium hexafluorophosphate**, [IL-0020-HP](#)
- **1-Hexadecyl-3-methylimidazolium chloride**, [IL-0115-HP](#)

Nano-Kit II: („Variation cation“)

- **-Butyl-3-methylpyrrolidinium bis(trifluoromethylsulfonyl)imide**, [IL-0035-HP](#)
- **1-Methyl-1-octylpyrrolidinium bis(trifluoromethylsulfonyl)imide**, [IL-0121-HP](#)
- **Butyltrimethylammonium bis(trifluoromethylsulfonyl)imide**, [IL-0032-HP](#)
- **Triethylsulfonium bis(trifluoromethylsulfonyl)imide**, [IL-0030-HP](#)
- **Trihexyltetradecylphosphonium bis(trifluoromethylsulfonyl)imide**, [IN-0021-HP](#)

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