

Ionic Liquids par excellence

Ionic Liquid Production & Development

COMPANY OVERVIEW

Company name: proionic GmbH
Headquarter: Grambach, Austria
Founded: 2004

Leading manufacturer and supplier of ionic liquids
Serving the
electronic, textile, pulp & paper, automotive,
metallurgical and any other industry

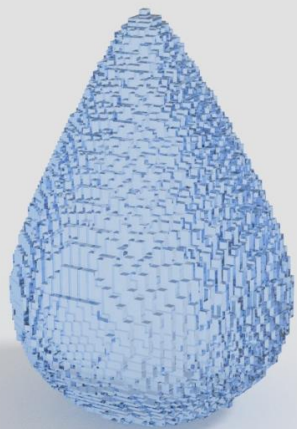
SERVICE PORTFOLIO

- | Production of next generation purity ionic liquids
- | Research & development
- | Recycling of proionic's ionic liquid products

COMPANY PROFILE

proionic, a pioneer in the field and a globally leading manufacturer and supplier of ionic liquids, offers innovative solutions for the efficient & competitive development & production of ionic liquids and corresponding applications.

Exclusive technologies and long-time experience are the basis for world's most innovative ionic liquid manufacturing technology. proionic stands out due its exclusive **CBILS® production process**, a unique ionic liquid production technology for the efficient, safe, halide- and waste-free production of ultra-pure ionic liquids from kg- to ton scale.



Ionic Liquids par excellence

TECHNOLOGY - CBILS®

a unique ionic liquid production technology for halide- & waste-free, safe and economic production of ultra-pure ionic liquids

One of the most advanced commercialized methods for a greener industrial production of high-purity ionic liquids is our so-called Carbonate Based Ionic Liquid Synthesis (CBILS®, a registered trademark of proionic GmbH) process. This entirely halide- and waste-free production route, using carbonic acid esters as quaternization reagents, overcomes most of the drawbacks of conventional synthetic approaches and reduces the use of noxious chemicals to a minimum.

proionic's powerful CBILS® ionic liquid production process enables a theoretically unlimited combination of cations and anions. Choose either one of our EMIM- or BMIM-based bestsellers or have your individual ionic liquid tailor-made by choosing cation and anion as desired.

TECHNOLOGY DEVELOPMENT with proionic

proionic enables the implementation of innovative technologies which emerge from the combination of ionic liquids, application expertise and technical realization. We offer our customers the opportunity to jointly develop completely new products and bring them to market, using proionic's ionic liquid and profound know-how.

KEY BENEFITS

- | halide-free ionic liquid products (<5 ppm)
- | water levels in ionic liquids below 50 ppm realizable on large scale
- | high batch-to-batch reproducibility
- | closed loops - no waste generated during synthesis/production (high atom economy)
- | clean-up of products not necessary, except for the distillation of solvent excess
- | the CBILS methylcarbonate intermediates are converted quantitatively with almost every Brønsted acid available to the final ionic liquid (modular system)
- | as an alternative to acids, ammonium salt can be used for the conversion of the methylcarbonate intermediates
- | easy scale-up to a multi ton level
- | batch and continuous-flow production processes available for various standard products
- | perfect ratio between cation and anion easily adjustable
- | high process safety