

ROO®

NEWSLETTER



SPRING 2023

WHAT'S NEW?

We are excited to share that we are in the process of updating our website, and expanding our product catalog. At the time of project completion, there will be over 400 products available on our website. In addition to the Ionic Liquids we currently offer, we are now proud to offer a category of [Metal Salts](#). We will also be adding ionic liquid electrolytes for battery applications to our products portfolio. Stay tuned.

Ionic Liquids are becoming increasingly prominent in multiple areas of research such as energy storage, additives in lubricants etc. For more details, please see page 2!



We are so thankful for your business and value your feedback as we work on updating our website. Attached is a link to a brief [survey](#) about our website and how it functions. We would love your thoughts on what works, what could be improved, or any other suggestions you might have!

SPOTLIGHT ON METAL SALTS

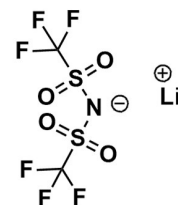
Metal Salts, specifically Lithium are becoming very popular. These products have a variety of uses, including Battery Applications, and Energy Storage. Below are just a few of the products we offer! Please let us know how we can help you find the product that is right for you.

[Lithium bis\(trifluoromethylsulfonyl\)imide, 99%](#)

Product Code: KI-0001-HP

CAS NO: 90076-65-6

This is used in Li-ion battery formulations. We also offer [Ultra-High Purity](#) version.

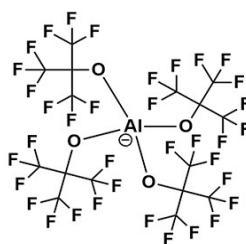


[Lithium tetrakis\(perfluoro-tert-butoxy\)aluminate](#)

PRODUCT CODE: KI-0018-HP

CAS NO: 274933-96-9

This is used as a versatile building block for the synthesis of complex molecules and as an effective reagent in organic reactions.



Ionic Liquids in Industrial Applications

Research in the field of ionic liquids (ILs) has increased since their initial discovery in 1914 by Paul Walden. Ionic liquids, salts in a liquid state, are frequently described as being liquid below an arbitrary value of 100°C. However, one should not use this constraint for a substance to be considered an IL. We think of any organic salt which melts without decomposition as an ionic liquid at that temperature. The organic nature of ILs is attributed to the bulky and unsymmetrical structure of the constituent ions, which can be paired together in different combinations to target specific properties such as electrical, chemical, and thermal.

ILs have been investigated in an extensive range of applications including solvents, catalysts, lubricants, and in several electrochemical applications such as batteries, super capacitors etc. RoCo has been developing our own ILs for [polymer recycling](#) and polymeric composites.

ILs are no longer an academic curiosity and they are used in several industrial applications and processes. ILs are increasingly replacing toxic, flammable and highly volatile industrial processes. However, not all ILs are environmentally friendly. Depending on the chemical structure, some ILs are extremely toxic to humans and the environment. IL toxicity, particularly toward aquatic organisms, has been identified as an emerging problem. As the use of ILs increases, we should pay particular attention before choosing an ionic liquid for a specific application.

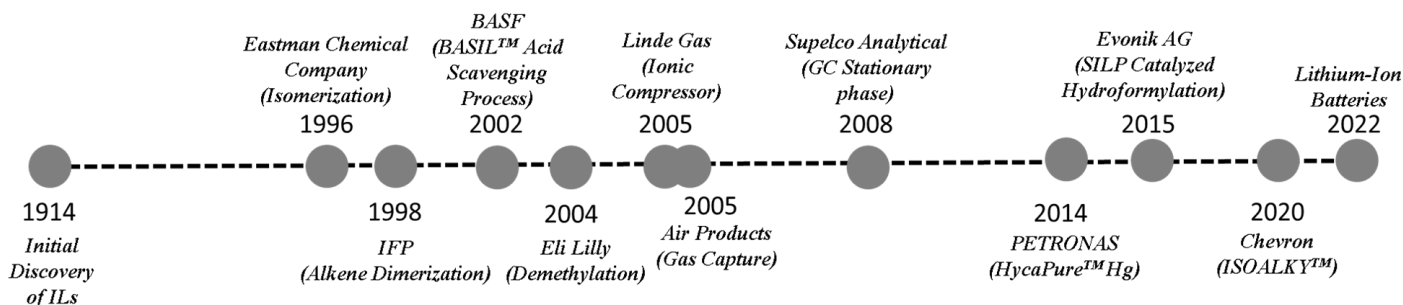
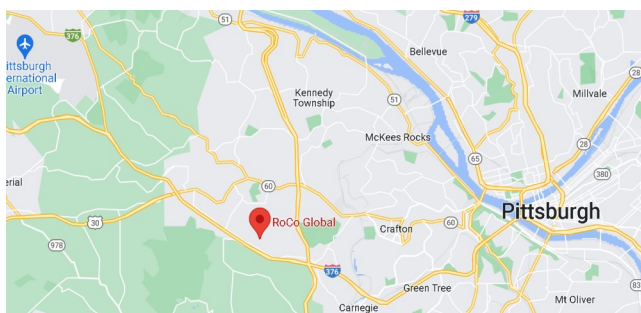


Image Adapted from [Molecules | Free Full-Text | Industrial Applications of Ionic Liquids \(mdpi.com\)](#)

ILs are highly thermally stable and due to their ionic nature they are generally non-flammable. Their low vapor pressure at ambient temperature has also garnered quite a bit of interest in decreasing volatile organic content (VOC). These properties have been quite useful in increasing the safety of high temperature applications. One of the areas which ILs have had a major impact is in energy storage [resulting in improved performance](#) and safety.

The possibilities for IL application seem endless. It's important to understand the structure property relationships of ILs to maximize their performance in a specific application while minimizing their environmental impact. Learn more about how we can help you with a material application by using ionic liquids as additives in your application. [Contact RoCo Global](#) today to learn more!



For More Information

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