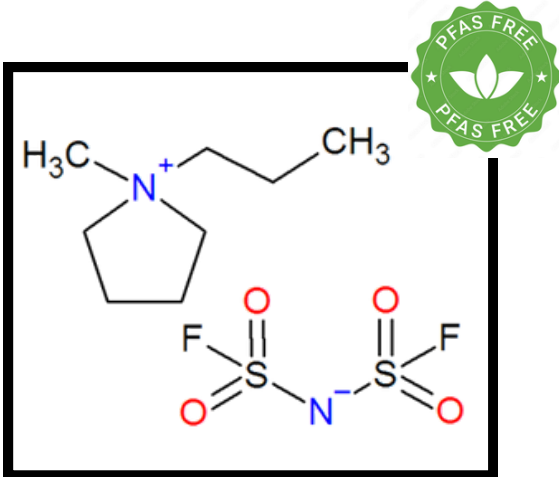


Ionic liquids: The key to next-gen energy storage solution

Discover how PYR13FSI, a high-performance ionic liquid, pushes the boundaries of safety, conductivity, and innovation across next-generation battery technologies.



Advantages of N-Propyl-N-methylpyrrolidinium bis(fluorosulfonyl)imide (PYR13FSI) :

- Wide electrochemical stability (>5 V)
- High ionic conductivity (9 mS/cm)
- Wide liquid range (Melting point: -9° C)
- Non-volatile and non-flammable
- High flash point > 250°C
- Fully REACH compliant



ZOOM ON: PYR13FSI, ENABLING SAFER AND SUSTAINABLE BATTERIES



- (1) Its wide electrochemical stability enables the use of high-voltage cathode materials such as LNMO
→ Paving the way for next gen (Gen3) Li-ion batteries.
- (2) PYR13FSI based electrolyte shows an excellent K-ion reversibility in graphite electrodes
→ Towards cost effective K-ion batteries.
- (3) PYR13FSI combined with KFSI results in KF enriched SEI that suppresses dendrite formation on potassium anodes
→ Unlocking high-energy K-metal batteries.
- (4) The localized high concentration electrolyte (LHCE) blends with PYR13FSI increase ionic mobility of Na⁺ and the stability of the SEI layer
→ Delivers high performance at room temperature and low-temperature use of Na-S batteries.

Area of application : Aerospace, energy storage, IoT applications

Product reference : PYR1333, CAS: [852620-97-4], click [here](#)
LiFSI, CAS: [171611-11-3], click [here](#)
NaFSI, CAS: [100669-96-3], click [here](#)
KFSI, CAS: [14984-76-0], click [here](#)

Packaging : From 10g to 40 ton per year

Publications:

- (1) Lee, H. J. et al. Chem. Mater. 33, 1238–1248 (2021).
- (2) Fiore, M. et al. Chem. Mater. 32, 7653–7661 (2020).
- (3) Jeon, J. et al. Journal of Colloid and Interface Science 670, 617–625 (2024).
- (4) Guo, D. et al. Adv Funct Materials 34, 2409494 (2024).

CONTACT US FOR MORE INFORMATION

*You get 10% off the PYR13FSI until 03/06/2025. This offer can not be combined with other current promotions.