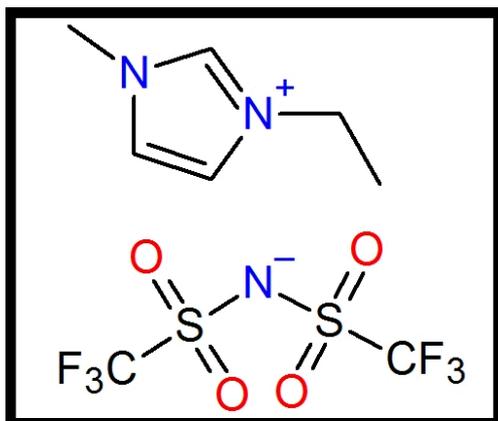


## EMIM TFSI : A stable solvent for high temperature synthesis and electrosynthesis

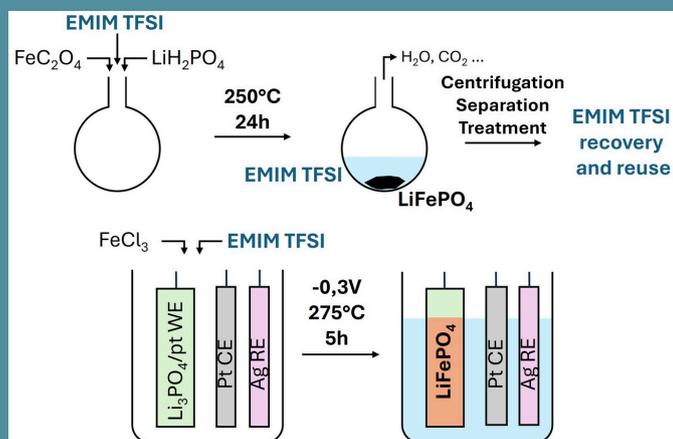
**1-Ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide**  
CAS : [174899-82-2]



### Advantages

- High chemical stability (resistant to hydrolysis and oxidation)
- High thermal stability (Degrades over 280°C)
- Can dissolve many organic and inorganic compounds
- Wide liquid range (melts at -20°C)
- No vapor pressure
- Strong absorption of microwave energy

## ZOOM ON : SYNTHESIS OF HIGH VALUE AND TUNABLE LITHIUM AND SODIUM COMPOUNDS FOR ENERGY STORAGE DEVICES



Used for the production of  $\text{LiFePO}_4$ , a Li-ion battery cathode. Other salts produced include  $\text{LiMSO}_4\text{F}$  ( $\text{M} = \text{Fe, Co, Ni}$ ),  $\text{Na}_2\text{MnPO}_4\text{F}$ ,  $\text{NaFeSO}_4\text{F}$ . → **Versatility**

Stable at high temperatures (>250°C), with an applied potential for electrochemical assistance and under microwave irradiation → **New opportunities for synthesis**

In some cases, EMIM TFSI can be recovered and reused → **Green and economical**

Crystalline structure of products can be modified by changing the anion or cation → **Tunable products**

**Area of application** : Synthesis, electrosyntheses and solvation

**Product reference** : IM0208A, click [here](#)

**Packaging** : From 50g to 1 ton per month

- (1) N. Recham et al. *Chemistry of Materials* (2009), 21, 1096–1107
- (2) J-M Tarascon et al. Patent WO2010046608A1 (2010)
- (3) Y. Chen et al. *Electrochemistry Communications* (2011), 13 (7), 673–676
- (4) Ashton et al. *Journal of Materials Chemistry A*, 2014, 2, 6238

**CONTACT US FOR MORE INFORMATION**