

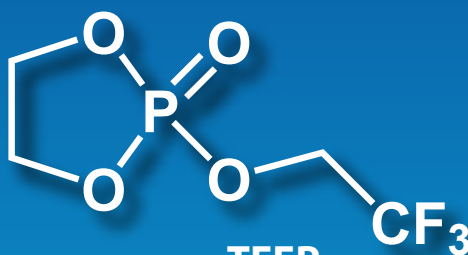
New

MATERIALS



Highly Flame-retardant Electrolyte Additive for Lithium-ion Battery

TFEP



TFEP
1g / 5g
[E1456]

Advantages

- Cyclic phosphate ester with high flame retardance
- High oxidation potential due to containing fluorine atoms
- Improves battery cycle characteristics due to high solid electrolyte interphase (SEI) film formation capability
- Realizes high capacity by forming cathode electrolyte interface (CEI) layer (on NMC cathode)

References

- 1) K. Shima, K. Ishigaki, S. Yasukawa, S. Mori, Jpn. Pat. Appl. H11-067232 A, **1999**.
- 2) C. Su, Z. Zhang, *et al.*, *ACS Appl. Mater. Interfaces* **2017**, 9, 0686. DOI: <https://doi.org/10.1021/acsami.7b08953>
- 3) Q. Zheng, Y. Yamada, R. Shang, S. Ko, Y. Y. Lee, K. Kim, E. Nakamura, A. Yamada, *Nat. Energy* **2020**, 5, 291. DOI: <https://doi.org/10.1038/s41560-020-0567-z>

Related Products

Electrolyte Solvents for Lithium-ion Battery

FEMC (= Methyl 2,2,2-Trifluoroethyl Carbonate)

5g / 25g [M3376]

EC (= Ethylene Carbonate)

25g / 500g [E0076]

DMC (= Dimethyl Carbonate)

25mL / 100mL / 500mL [C0053]

Lithium Electrolytes

LiFSI (= Lithium Bis(fluorosulfonyl)imide)

5g / 25g [L0281]

LiPF₆ (= Lithium Hexafluorophosphate)

25g / 100g [L0146]

LiTFSI (= Lithium Bis(trifluoromethanesulfonyl)imide)

25g / 250g [B2542]

For further information please refer to our website at www.TCIchemicals.com.

TCI battery



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