MATERIALS



Flame-retardant and Overcharge Protection Electrolyte Additives for Lithium-ion Battery





Ethyl Ethylene Phosphate

1g / 5g

TFEP 1g / 5g F1456

Advantages

- Cyclic phosphate esters with flame retardance
- Prevent sharp voltage rise and protect against overcharging
- Contribute to improved coulomb efficiency and cycle stability due to the SEI and CEI formations

References

New

- Ethylene ethyl phosphate as a multifunctional electrolyte additive for lithium-ion batteries D. Gao, J. B. Xu, M. Lin, Q. Xu, C. F. Ma, H. F. Xiang, RSC Adv. 2015, 5, 17566. https://doi.org/10.1039/C4RA15899G
- Functionality Selection Principle for High Voltage Lithium-ion Battery Electrolyte Additives C. Su, Z. Zhang, et al., ACS Appl. Mater. Interfaces 2017, 9, 30686. https://doi.org/10.1021/acsami.7b08953
- A cyclic phosphate-based battery electrolyte for high voltage and safe operation Q. Zheng, Y. Yamada, R. Shang, S. Ko, Y. Lee, K. Kim, E. Nakamura, A. Yamada, Nat. Energy 2020 5, 291. https://doi.org/10.1038/s41560-020-0567-z

Related Product

Phosphate-type Electrolyte Additive for Lithium-ion Battery TTFPa (= Tris(2,2,2-trifluoroethyl) Phosphate

5g / 25g [T3203]

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