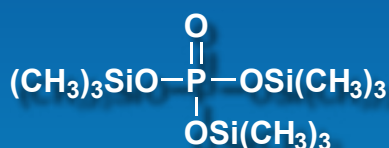


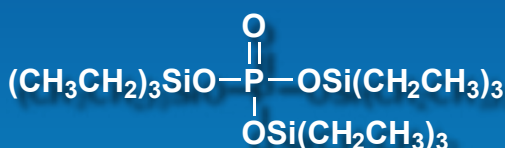
Electrolyte Additives for Secondary Batteries

Tris(trialkylsilyl) Phosphates



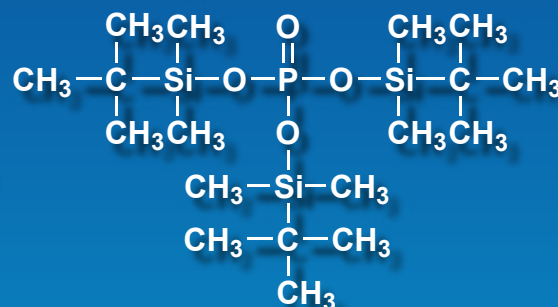
Tris(trimethylsilyl) Phosphate

5g / 25g
[P1248]



Tris(triethylsilyl) Phosphate

5g
[T4111] **New**



Tris(*tert*-butyldimethylsilyl) Phosphate

5g
[T4119] **New**

When **P1248** is used as an additive for lithium-ion batteries, the following features are reported:

- Forming an artificial solid electrolyte interface (SEI) layer
- Reducing an interface impedance
- Protecting an electrode material from eroding by hydrogen fluoride
- Enhancing initial discharge capacity
- Improving cyclic stability and capacity retention

TCI also offers **T4111** and **T4119** as the analogues.

References

- 1) Tris(trimethylsilyl)phosphate: A film-forming additive for high voltage cathode material in lithium-ion batteries
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- 2) Artificial Interface Deriving from Sacrificial Tris(trimethylsilyl)phosphate Additive for Lithium Rich Cathode Materials
J. Zhang, J. Wang, J. Yang, Y. NuLi, *Electrochim. Acta* **2014**, 117, 99. <https://doi.org/10.1016/j.electacta.2013.11.024>
- 2) Importance of Reduction and Oxidation Stability of High Voltage Electrolytes and Additives
S. A. Delp, O. Borodin, T. Jow, *et al.*, *Electrochim. Acta* **2016**, 209, 498. <https://doi.org/10.1016/j.electacta.2016.05.100>

Related Product

Tris(trimethylsilyl) Phosphate

5mL / 25mL [P1217]

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



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