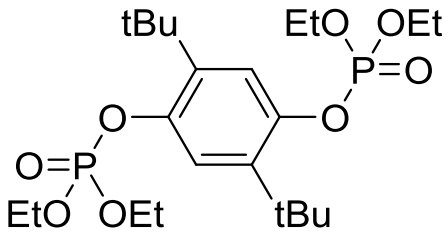
Catalog #D282010 2,5-Di-t-butyl-1,4-phenylene tetraethyl bis(phosphonate), 99+% Redox shuttle ANL-RS6



Redox Shuttles for Lithium Ion Batteries

1. Provides a long term intrinsic overcharge protection of lithium-ion batteries.
2. Maintains the safe operation of lithium-ion batteries.
3. Highly-soluble in conventional non-aqueous, carbonate based electrolytes.
4. Increases battery long-term stability and oxidation potential.

Electrochemical Properties:

1. ANL-RS6 (10 mM) exhibits a reversible redox potential of about 4.8V vs Li/Li^+ (1.2 M $LiPF_6$ in 3:7 wt/wt mixtures of ethylene carbonate and ethyl methyl carbonate.[1]
2. In cell tests using $LiMn_2O_4$ and $Li_{1.2}Ni_{0.15}Co_{0.1}Mn_{0.55}O_2$ as the cathode materials, overcharge protection was provided at 4.75 V vs. Li/Li^+.[1]

References:

1. *Energy Environ. Sci.,* **2011**, *4*, 2858.