

四氟硼酸锂

Lithium
Tetrafluoroborate



产品综述

Product summary

四氟硼酸锂 (LiBF_4) 为白色或微黄色粉末, 极易溶于水, 在碳酸酯溶剂、醚类化合物中有很好的溶解性, 熔点在 $293\text{--}300^\circ\text{C}$ 之间, 相对密度为 0.852 g/cm^3 。四氟硼酸锂具有较好的化学稳定性和热稳定性, 主要作为 LiPF_6 基电解质体系添加剂, 改善循环寿命, 提高锂离子电池性能。在电解液中添加 LiBF_4 之后可拓宽锂离子电池的工作温度范围, 提高电池的高低温放电性能。

Lithium Tetrafluoroborate (LiBF_4) is white or yellowish powder, easily soluble in water, carbonate solvent and ethers compounds. The melting point of LiBF_4 is $293\text{--}300^\circ\text{C}$, with the relative density of 0.852g/cm^3 . LiBF_4 has excellent chemical and thermal stability and is mainly used as an additive in LiPF_6 based electrolyte system to improve cycle life and performance of lithium batteries. By adding LiBF_4 to the electrolyte, the operating temperature range of the lithium battery can be broadened and the high-low temperature discharge performance of the battery can be improved.



产品指标

Quality specification

项目 Items	单位 Units	指标 Specification
四氟硼酸锂 Lithium tetrafluoroborate	$\omega/\%$	≥ 99.9
水分 Moisture	$\omega/\%$	≤ 0.0050
硫酸盐 (以 SO_4 计) Sulfate	mg/kg	≤ 30
氯化物 (以 Cl 计) Chlorid	mg/kg	≤ 30
铁 (Fe) Iron	mg/kg	≤ 10
钾 (K) Kalium	mg/kg	≤ 30
钠 (Na) Sodium	mg/kg	≤ 30
钙 (Ca) Calcium	mg/kg	≤ 30
铅 (Pb) Plumbum	mg/kg	≤ 10