•综　述•

锂-硫酰氯电池的性能改进

张自禄，卢嘉春，杨裕生

（西北核技术研究所，陕西 西安　710024）

摘要：综述了锂-硫酰氯电池的优缺点和性能改进等方面的研究工作。锂-硫酰氯电池是一种液体正极一次电池，开路电压高，安全性能好，负极锂的腐蚀和正极的极化是该电池最主要的缺点。通过增大正极表面积、在电解液中加入添加剂或者改进电池结构等方法，可以改善电池的性能。

关键词：锂-硫酰氯电池；一次电池；添加剂

中图分类号：TM911.1　文献标识码：A　文章编号：1001-1579(2004)03-0187-02

Improvement of performance for lithium/sulfuryl chloride cell

ZHANG Zi-lu，LU Jia-chun，YANG Yu-sheng

（*Northwest Institute of Nuclear Technology, Xi'an, Shanxi* 710024, *China*）

Abstract: Advantages，disadvantages and performance improvement of the lithium/sulfuryl chloride (Li/ SO_2Cl_2) cell had been reviewed. The Li/SO_2Cl_2 cell was a kind of liquid cathode primary battery. A higher open circuit voltage and safe in use were its advantages; anode corrosion and cathode polarization were the main defects of the cell. The cell's performance could be improved by enlarge cathode surface area cathode, using electrolyte containing additives, and alternate its construction.

Key words: lithium/sulfuryl chloride cell；primary battery；additives