

# 无汞碱锰电池用 EMD 中微量钴的测定

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摘要: 研究了在硫氰酸铵—盐酸体系中, 用甲基异丁基甲酮(MIBK)萃取富集钴的硫氰化物络合物, 与大量的锰分离, 有机相用火焰原子吸收光谱法测定钴。方法的选择性好, 灵敏度较高, 测定范围: 0.2~20  $\mu\text{g/g}$ 。

关键词: 电解二氧化锰; 钴; 萃取; 火焰原子吸收光谱法

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## Determination of cobalt in electrolytic manganese dioxide for mercury-free alkaline Zn/MnO<sub>2</sub> battery

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**Abstract:** In the system of ammonium thiocyanate—hydrochloric, the Co(II) ions were separated by extraction of its thiocyanate anionic complexes with methyl isobutyl ketone (MIBK) from abundance of manganese. Cobalt in organic phase was determined by flame atomic absorption spectrometry. The method had good selectivity and high sensitivity. The range of determination of the method was 0.2~20  $\mu\text{g/g}$ .

**Key words:** electrolytic manganese dioxide; cobalt; extraction; flame atomic absorption spectrometry

电池杂志

BATTERY BIMONTHLY