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Identification and Optimization of Electrolyte Additives in the Primary Battery

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Abstract

In the present work ion chromatography (IC) ,gas chromatography- mass spectrometry(GC-MS), inductively coupled plasma (ICP) and acid base titration were applaied for identification and determination of organic and inorganic additives in sulfuric acid electrolyte for the primary PbO_2-Zn battery. The present work deals with the determination of several chemical species not only in pure sulfuric acid, but also in the PbO_2-Zn battery electrolyte during its cycling.

Keywords: Identification, Additive; Battery

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