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 applied 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
