

A REVIEW OF HYDROMETALLURGICAL FLOWSHEETS CONSIDERED FOR THE TREATMENT OF BLACK MASS

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Abstract

Recycling of lithium-ion batteries is generating significant attention. This paper focusses on the hydrometallurgical treatment of the black mass stream and will provide a review of flowsheets considered by current companies.

The paper will focus on feed characterization, leach chemistry, SX circuits considered, discuss production of intermediate products versus metal sulphate salts and also comment on lithium recovery options.

Keywords: Lithium-ion batteries, Black mass, hydrometallurgical treatment, flowsheets, recovery options