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Solvent Extraction of Rb and Cs from Jarosite Slag Using t-BAMBP

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Abstract : Lepidolite after extraction of Lithium by sulfate produced many jarosite slag which contains a lot of Rb and Cs.The separation and recovery of Rubidium(Rb) and Cesium(Cs) can make full of use of Lithium mica. XRF analysis showed that the slag mainly including K Rb Cs Al and etc. Fractional solvent extraction tests were carried out; the results show that using20% t-BAMBP plus 80% sulfonated kerosene, the separation of Rb and Cs can be achieved by adjusting the alkalinity. Extraction is the order of Cs Rb, ratio of Cs to Rb and ratio of Rb to K can reach above 1500 and 2500 respectively.

Keywords : cesium, jarosite slag, rubidium, solvent extraction, t-BAMBP
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