

Solvent extraction of molybdenum with D2EHPA under aerosol phase

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Abstract:

A new extraction technique termed aerosol phase liquid-liquid extraction was developed. This method was applied for the extraction of molybdenum from aqueous hydrochloric and phosphoric media with an organophosphorus extractant (D2EHPA) dissolved in n-hexane. The new method was based on the nebulisation of the aqueous sample onto the extracting solution in order to maximize the contact surface.

The results indicated that this new extraction technique was an efficient method for the extraction of molybdenum compared to the conventional extraction method. Equilibrium time was shortened under aerosol phase extraction and molybdenum extraction yields were comparable, or better as compared to those obtained under conventional liquid-liquid extraction method. The optimal extraction conditions were also evaluated and optimized.

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