

Crystallizations for Solvent and Modifier of Molybdenum and Excess Molar Volumes and Refractivity Deviations

권락현, 박소진*, 최영운¹, 김상배¹
충남대학교; ¹한국지질자원연구원
(sjpark@cnu.ac.kr*)

Molybdenum (Mo) can withstand at extreme temperatures without significantly expanding or softening makes, which makes it useful in many applications such as aircraft parts, electrical contacts, industrial motors, and filaments, etc. Reusing and recovering selective solvent and modifier for extraction and purification processes of Mo are still interested for scientist and relate engineer for developing clean technology. Alamine304-1 has been found to be a good selective solvent for Mo. In this work, Solid-Liquid Equilibrium (SLE) data for crystallization were examined for binary systems. The experimental data have been correlated by Non Random Two Liquid (NRTL) and UNiversal QUAsi Chemical (UNIQUAC) models. In addition, physical properties VE and ΔR for solvents and modifiers 298.15 K are reported. The measured data VE and ΔR data were correlated well with the Redlich-Kister equation.

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