

Liquid compound stratification details in quasi-ternary system $\text{LiF-RbI-Li}_2\text{CrO}_4$

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Keywords: phase transition, differential thermal analysis, liquid compound stratification, quasi-ternary system, stable triangle, nonvariant monotectic equilibrium, geometric modeling of phase complex.

Abstract

Phase complex of quasi-ternary system $\text{LiF-RbI-Li}_2\text{CrO}_4$ was studied. This system is a stable triangle of quaternary reciprocal system Li,Rb|F,I,CrO_4 . System geometric model was designed based on experimental data of polythermal sections. Analysis of model demonstrates that two fields exist in this system. First field is characterized as nonvariant monotectic equilibrium: $L_2 \rightleftharpoons L_1 + \text{LiF} + \text{RbI}$ and second field is characterized as monovariant monotectic equilibrium: $L_2 \rightleftharpoons L_1 + \text{LiF}$. In this work phase reactions are presented for non-, mono- and divariant phase equilibria. Eutectic point characteristics were found.