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The study of the solubility of complexes with general formula $aM^nCl_n \cdot mZnCl_2 \cdot pEt_2O$ in the media of diethyl ether (where M = Li, Mg, Ca, Sr, Ba; a = 1-2; n = l-2; m = l.2; p = 2-6; Et_2O – diethyl ether)

© **Yury M. Mikhailov**,[1]* **Roza F. Gatina**,[1]* **Zalimkhan K. Omarov**,[2+] and **Oksana N. Shakurskaya**[1]
Federal State Enterprise "State Scientific-Research Institute of Chemical Products". Svetlaya St., 1. Kazan, 420033. Russia. Phone: Phone: +7 (843) 544-07-21. E-mail: gniihp@bancorp.ru;
[2)] *Phone: +7 (843) 541-76-02. E-mail: omarov@mail.ru*

*Supervising author; [+]Corresponding author

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Abstract

For isothermal solubility studies in systems M^nCl_n-$ZnCl_2$-Et_2O, 298K we have established the regions of equilibrium crystallization of complexes: $aM^nCl_n \cdot mZnCl_2 \cdot pEt_2O$ (where M = Li, Mg, Ca, Sr, Ba; n = 1-2; m = l.2; p = 2-6; Et_2O – diethyl ether) and the formation of chloride complexes: $LiCl \cdot ZnCl_2 \cdot 4Et_2O$, $LiCl \cdot ZnCl_2 \cdot 4Et_2O$, $MgCl_2 \cdot ZnCl_2 \cdot 2Et_2O$, $CaCl_2 \cdot ZnCl_2 \cdot 4Et_2O$, $SrCl_2 \cdot ZnCl_2 \cdot 4Et_2O$, $2BaCl_2 \cdot ZnCl_2 \cdot 6Et_2O$.

Discovered complexes were isolated. By elemental analysis we established the composition of phases formed in the system $aM^nCl_n \cdot mZnCl_2 \cdot pEt_2O$.