Phase Equilibria in Copper(I) Bromide-MBr Systems (M = Li, Na, K)

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The phase equilibria of CuBr-LiBr, CuBr-NaBr and CuBr-KBr were studied by difference scanning calorimetry (DSC) and X-ray powder diffraction. Extended solid solutions have been found in CuBr-LiBr, while mutual solid solubility of the components of CuBr-NaBr and CuBr-KBr seems to be negligible. It has been confirmed that K_2CuBr_3 is stable at room temperature.

Key words: Phase Diagram; DSC; CuBr; LiBr; NaBr; KBr.