

substance: $\text{Co}_{1-x}\text{Ni}_x\text{As}_2$, $\text{Co}_{1-x}\text{Ni}_x\text{Sb}_2$

property: physical properties

$\text{Co}_{1-x}\text{Ni}_x\text{As}_2$

homogeneity range: $x = 0 \dots 1$ at 1100.K [63R], $x \leq 0.7$ at 573 K [79K].

monoclinic for $x \leq 0.25$ [63R].

$\alpha - \beta$ transformation temperature: Fig. 1.

$\text{Co}_{1-x}\text{Ni}_x\text{Sb}_2$

homogeneity ranges: $x = 0 \dots 0.02$ and $\approx 0.97 \dots 1$ [70B].

References:

- 63R Roseboom, E. H.: Amer. Mineral. 48 (1963) 271.
70B Bjerkelund, F., Kjekshus, A.: Acta Chem. Scand. 24 (1970) 3317.
79K Kjekshus, A., Rakke, T.: Acta Chem. Scand. A33 (1979) 609.

Fig. 1.

$\text{Co}_x\text{Ni}_{1-x}\text{As}_2$, $\text{NiAs}_{2-x}\text{S}_x$, $\text{NiAs}_{2-x}\text{Se}_x$. Temperature of the pararammelsbergite (α) – marcasite (β) transformation vs. concentration of substituent [79K].

