

Thermal properties

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High Temperature X-Ray Diffraction Studies on Sodium Yttrium Fluoride. —

The structural behavior of hexagonal $\text{Na}_{1.5}\text{Y}_{1.5}\text{F}_6$ (I) and cubic NaYF_4 (II) is studied over the temperature range 293—1073 K. The coefficient of the average volume thermal expansion of (II) ($\alpha_v = 81.68 \cdot 10^{-6} \text{ K}^{-1}$) is found to be higher than that of (I)

($\alpha_v = 66.25 \cdot 10^{-6} \text{ K}^{-1}$). Both phases are stable up to 773 K and decompose above 1000 K.

— (MATHEWS, M. D.; AMBEKAR, B. R.; TYAGI*, A. K.; KOEHLER, J.;

J. Alloys Compd. 377 (2004) 1-2, 162-166; Appl. Chem. Div., Bhabha At. Res. Cent., Trombay, Bombay 400 085, India; Eng.) — Schramke