substance: $RhBi_2$
property: physical properties

$RhBi_2$ (r) (α-$RhBi_2$)

semiconductor?

magnetic susceptibility
(in 10^{-6} cm^3 mol^{-1}, χ in CGS units)

χ_m	– 161	T = 295 K	polycrystalline sample	71K
	– 154 – 0.026T	T = 80...650K		

lattice parameters $a(T)$, $b(T)$, $c(T)$, $\beta(T)$ in the range 300...690 K [77K].

volume expansion coefficient

β	$2.3 \cdot 10^{-5}$ K^{-1}	T = 300 K	from graphic representation; β increases continuously with T	77K
	$1.2 \cdot 10^{-5}$ K^{-1}	T = 650 K		

transition temperature

T_{tr}	698 K		transition to another monoclinic (?) structure	77K

The arsenopyrite → loellingite transition should take place near 700 K [77K].

Comparative tables on structural data of transition metal dipnictides:

structure, chemical bond: see document ,

crystallographical data of compounds with octahedrally coordinated cations, see document ,

interatomic distances in arsenopyrite-type phases, see document .

References:

71K Kjekshus, A.: Acta Chem. Scand. 25 (1971) 411.
77K Kjekshus, A., Rakke, T.: Acta Chem. Scand. A31 (1977) 517.