

Enthalpy of formation of Lu-Ni (lutetium-nickel) system

Thermodynamics

With high-temperature direct synthesis calorimetry Guo et al. [98Guo] [97Guo] have determined the standard enthalpy of formation of LuNi and of LuNi₅. The values are obtained at the temperature 1476 ± 2 K and are shown in Table 1.

Table 1 Lu-Ni. The standard enthalpies of formation [97Guo], [98Guo]

Phase	ΔH^S [kJ g-at ⁻¹]	Reference
LuNi	-47.3 ± 2.2	[98Guo]
LuNi ₅	-30.0 ± 0.8	[97Guo]

Symbols and abbreviations

Short form	Full form
ΔH^S	integral enthalpy of formation of a solid alloy

References

- [97Guo] Guo, Q., Kleppa, O.J.: J. Alloys Comp. **256** (1997) L15
 [98Guo] Guo, Q., Kleppa, O.J.: J. Alloys Comp. **270** (1998) 212