

Enthalpy of formation of La-Pt (lanthanum-platinum) system

Thermodynamics

Using high-temperature direct synthesis calorimetry at 1474 ± 2 K to determine the enthalpy of reaction and regarding the average heat content at the same temperature, Selhaoui et al. [93Sel] and Guo et al. [95Guo] have calculated standard enthalpies of formation of intermediate phases. The results are shown in Table 1.

Table 1 La-Pt. Standard enthalpies of formation of intermediate phases

Phase	ΔH_{298}^S [kJ g-at ⁻¹] [93Sel]	ΔH_{298}^S [kJ g-at ⁻¹] [95Guo]
LaPt ₂	-90.0 ± 2.9	
LaPt	-92.1 ± 4.6	-99.7 ± 2.9

Symbols and abbreviations

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

References

- [93Sel] Selhaoui, N., Kleppa, O.J.: J. Alloys Comp. **191** (1993) 155
 [95Guo] Guo, Q., Kleppa, O.J.: J. Alloys Comp. **218** (1995) L21