



>>Entry Name: Aluminium antimonide (AlSb)

CAS Registry Number: 25152-52-7

AlSb

Molecular Formula: AlSb

Molecular Weight: 148.732

Accurate Mass: 147.88536

Percentage Composition: Al 18.14%; Sb 81.86%

General Statement: Has zinc blende struct.

Source/Synthesis: Synth. from elements

Use/Importance: Commercially available

Physical Description: Black solid

Melting Point: Mp 1080°

Other Data: $\Delta H_f^\circ -104.7 \text{ kJ mol}^{-1}$; $S^\circ 63 \text{ J K}^{-1} \text{ mol}^{-1}$; band gap 1.62 eV; n_D 3.18. ϵ 10.2

References:

Hilsum, C. *et al.*, *Semiconduc. III-V Compds.*, Pergamon, Oxford, 1961

Willardson, R.K. *et al.*, *Compound Semiconductors*, Reinhold, 1962, (*synth*)

Piespergen, U. *et al.*, *Z. Naturforsch., A*, 1963, **18**, 141, (*thermodyn*)

Willardson, R.K. *et al.*, *Semicond. Semimet.*, Academic Press, 1966, **1**; **2**; 1967, **3**; 1968, **4**

Mooradian, A. *et al.*, *Solid State Commun.*, 1966, **4**, 431, (*Raman*)

Van Vechten, J.A. *et al.*, *Phys. Rev.*, 1969, **182**, 891, (*cryst struct*)

O'Keefe, M. *et al.*, *Acta Cryst. B*, 1978, **34**, 3519, (*cryst struct*)