

Name and formula

Reference code: 00-015-0861
Compound name: Antimony Selenide
Empirical formula: Sb_2Se_3
Chemical formula: Sb_2Se_3

Crystallographic parameters

Crystal system: Orthorhombic
Space group: Pbnm
Space group number: 62

a (Å): 11,6330
b (Å): 11,7800
c (Å): 3,9850
Alpha (°): 90,0000
Beta (°): 90,0000
Gamma (°): 90,0000

Calculated density (g/cm³): 5,84
Volume of cell (10⁶ pm³): 546,09
Z: 4,00

RIR: -

Subfiles and quality

Subfiles: Alloy, metal or intermetallic
Inorganic
NBS pattern
Quality: Indexed (I)

Comments

Color: Dark gray
Creation Date: 01/01/1970
Modification Date: 01/01/1970
Color: Dark gray
Sample Source or Locality: Sample was obtained from Semitronics Inc., Winchester, Massachusetts, USA
Analysis: Spectroscopic analysis: 0.01 to 0.1% Te, and 0.001 to 0.01% each of Al and Si.
Temperature of Data Collection: Pattern taken at 25 C.

References

Primary reference: *Natl. Bur. Stand. (U.S.) Monogr. 25, 3, 7, (1964)*

Peak list

| No. | h | k | l | d [Å] | 2Theta[deg] | I [%] |
|-----|---|---|---|---------|-------------|-------|
| 1 | 1 | 1 | 0 | 8,28000 | 10,676 | 8,0 |
| 2 | 0 | 2 | 0 | 5,89000 | 15,029 | 25,0 |
| 3 | 2 | 0 | 0 | 5,82000 | 15,211 | 6,0 |
| 4 | 1 | 2 | 0 | 5,25000 | 16,874 | 55,0 |
| 5 | 2 | 2 | 0 | 4,14000 | 21,446 | 10,0 |
| 6 | 1 | 0 | 1 | 3,76000 | 23,643 | 12,0 |
| 7 | 1 | 3 | 0 | 3,72000 | 23,901 | 30,0 |
| 8 | 3 | 1 | 0 | 3,68200 | 24,152 | 16,0 |
| 9 | 0 | 2 | 1 | 3,29700 | 27,023 | 12,0 |
| 10 | 2 | 3 | 0 | 3,25300 | 27,395 | 70,0 |
| 11 | 2 | 1 | 1 | 3,16200 | 28,200 | 75,0 |
| 12 | 0 | 4 | 0 | 2,94500 | 30,326 | 2,0 |
| 13 | 4 | 0 | 0 | 2,91000 | 30,699 | 4,0 |
| 14 | 2 | 2 | 1 | 2,86800 | 31,160 | 100,0 |
| 15 | 3 | 0 | 1 | 2,77600 | 32,220 | 60,0 |
| 16 | 3 | 3 | 0 | 2,75900 | 32,424 | 10,0 |
| 17 | 3 | 1 | 1 | 2,70300 | 33,115 | 20,0 |
| 18 | 2 | 4 | 0 | 2,62900 | 34,075 | 60,0 |
| 19 | 4 | 2 | 0 | 2,60800 | 34,358 | 20,0 |
| 20 | 3 | 2 | 1 | 2,51300 | 35,700 | 30,0 |
| 21 | 0 | 4 | 1 | 2,36700 | 37,984 | 25,0 |
| 22 | 3 | 4 | 0 | 2,34500 | 38,354 | 14,0 |
| 23 | 4 | 3 | 0 | 2,33700 | 38,490 | 14,0 |
| 24 | 1 | 4 | 1 | 2,31900 | 38,801 | 35,0 |
| 25 | 4 | 1 | 1 | 2,30300 | 39,081 | 12,0 |
| 26 | 5 | 1 | 0 | 2,28200 | 39,456 | 8,0 |
| 27 | 3 | 3 | 1 | 2,26800 | 39,710 | 8,0 |
| 28 | 2 | 5 | 0 | 2,18400 | 41,305 | 35,0 |
| 29 | 5 | 2 | 0 | 2,16400 | 41,705 | 20,0 |
| 30 | 4 | 4 | 0 | 2,07000 | 43,694 | 10,0 |
| 31 | 4 | 3 | 1 | 2,01500 | 44,950 | 35,0 |
| 32 | 5 | 0 | 1 | 2,01000 | 45,068 | 30,0 |
| 33 | 5 | 3 | 0 | 2,00200 | 45,258 | 30,0 |
| 34 | 1 | 5 | 1 | 1,99800 | 45,354 | 25,0 |
| 35 | 0 | 0 | 2 | 1,98900 | 45,571 | 25,0 |
| 36 | 0 | 6 | 0 | 1,96300 | 46,209 | 8,0 |
| 37 | 6 | 0 | 0 | 1,93800 | 46,840 | 8,0 |
| 38 | 1 | 6 | 0 | 1,93600 | 46,892 | 8,0 |
| 39 | 6 | 1 | 0 | 1,91300 | 47,490 | 8,0 |
| 40 | 2 | 1 | 2 | 1,86100 | 48,902 | 8,0 |
| 41 | 6 | 2 | 0 | 1,84100 | 49,469 | 4,0 |
| 42 | 4 | 4 | 1 | 1,83700 | 49,584 | 4,0 |
| 43 | 5 | 4 | 0 | 1,82600 | 49,903 | 4,0 |
| 44 | 3 | 5 | 1 | 1,79700 | 50,765 | 8,0 |
| 45 | 5 | 3 | 1 | 1,78800 | 51,039 | 16,0 |
| 46 | 0 | 6 | 1 | 1,76100 | 51,879 | 45,0 |
| 47 | 3 | 6 | 0 | 1,75200 | 52,166 | 20,0 |
| 48 | 3 | 2 | 2 | 1,69800 | 53,956 | 14,0 |
| 49 | 6 | 2 | 1 | 1,67200 | 54,865 | 6,0 |
| 50 | 7 | 1 | 0 | 1,64600 | 55,807 | 6,0 |
| 51 | 1 | 4 | 2 | 1,63200 | 56,328 | 1,0 |
| 52 | 4 | 1 | 2 | 1,62800 | 56,479 | 1,0 |
| 53 | 6 | 4 | 0 | 1,61900 | 56,821 | 6,0 |
| 54 | 2 | 7 | 0 | 1,61700 | 56,898 | 8,0 |
| 55 | 7 | 2 | 0 | 1,60000 | 57,559 | 12,0 |
| 56 | 2 | 4 | 2 | 1,58600 | 58,115 | 18,0 |
| 57 | 4 | 2 | 2 | 1,58200 | 58,276 | 10,0 |
| 58 | 3 | 7 | 0 | 1,54400 | 59,854 | 8,0 |
| 59 | 1 | 7 | 1 | 1,53700 | 60,155 | 6,0 |

Stick Pattern

