

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

