

Name and formula

Reference code: 00-005-0565

Mineral name: Silicon, syn [NR]
PDF index name: Silicon

Empirical formula: Si
Chemical formula: Si

Crystallographic parameters

Crystal system: Cubic
Space group: Fd3m
Space group number: 227

a (Å): 5,4301
b (Å): 5,4301
c (Å): 5,4301
Alpha (°): 90,0000
Beta (°): 90,0000
Gamma (°): 90,0000

Calculated density (g/cm³): 2,33
Volume of cell (10⁶ pm³): 160,11
Z: 8,00

RIR: 4,70

Status, subfiles and quality

Status: Marked as deleted by ICDD
Subfiles: Inorganic
Mineral
Alloy, metal or intermetallic
Forensic
NBS pattern
Quality: Star (S)

Comments

Deleted by: Deleted by 27-1402, has higher Fn.
Color: Black, gray
Sample source: Sample from Johnson Matthey Company.
Analysis: Spectroscopic analysis: <0.001% Cu, Ag, Zn, Sn, Mg, Fe.
Temperature: X-ray pattern at 26 C.

References

Primary reference: Swanson, Fuyat., *Natl. Bur. Stand. (U.S.), Circ. 539*, II, 6, (1953)

Peak list

No.	h	k	l	d [Å]	2Theta[deg]	I [%]
1	1	1	1	3,13800	28,420	100,0

2	2	2	0	1,92000	47,306	60,0
3	3	1	1	1,63800	56,103	35,0
4	4	0	0	1,35700	69,173	8,0
5	3	3	1	1,24600	76,372	13,0
6	4	2	2	1,10830	88,059	17,0
7	5	1	1	1,04500	94,975	9,0
8	4	4	0	0,95990	106,735	5,0
9	5	3	1	0,91780	114,130	11,0
10	6	2	0	0,85860	127,574	9,0
11	5	3	3	0,82810	136,933	5,0

Stick Pattern

