

Name and formula

Reference code: 00-005-0664

Mineral name: Zincite, syn
Common name: zinc white
PDF index name: Zinc Oxide

Empirical formula: OZn
Chemical formula: ZnO

Crystallographic parameters

Crystal system: Hexagonal
Space group: P63mc
Space group number: 186

a (Å): 3,2490
b (Å): 3,2490
c (Å): 5,2050
Alpha (°): 90,0000
Beta (°): 90,0000
Gamma (°): 120,0000

Calculated density (g/cm³): 5,68
Measured density (g/cm³): 5,66
Volume of cell (10⁶ pm³): 47,58
Z: 2,00

RIR: 4,50

Status, subfiles and quality

Status: Marked as deleted by ICDD
Subfiles: Inorganic
Mineral
Alloy, metal or intermetallic
Common Phase
Forensic
NBS pattern

Quality: Indexed (I)

Comments

Deleted by: Deleted by 36-1451.
Color: Orange-yellow, dark red
General comments: Opaque mineral optical data on specimen from Sterling Hill, New Jersey, USA: R₃R%=11.8, Disp.=Std., VHN₁₀₀=190-219, Ref.: IMA Commission on Ore Microscopy QDF.

Sample source: Sample from New Jersey Zinc Company, Sterling Hill, New Jersey, USA.
Analysis: Spectroscopic analysis: <0.001% each of Mg, Si and Ca.
Optical data: B=2.013, Q=2.029, Sign=+
Melting point: 1670(10)°
Temperature: X-ray pattern at 26 C.

References

Primary reference: Swanson, Fuyat., *Natl. Bur. Stand. (U.S.), Circ. 539* **2**, 25, (1953)

Optical data: *Dana's System of Mineralogy; 7th Ed.* **1**, 504

Peak list

No.	h	k	l	d [Å]	2Theta[deg]	I [%]
1	1	0	0	2,81600	31,751	71,0
2	0	0	2	2,60200	34,440	56,0
3	1	0	1	2,47600	36,252	100,0
4	1	0	2	1,91100	47,543	29,0
5	1	1	0	1,62600	56,555	40,0
6	1	0	3	1,47700	62,870	35,0
7	2	0	0	1,40700	66,388	6,0
8	1	1	2	1,37900	67,917	28,0
9	2	0	1	1,35900	69,057	14,0
10	0	0	4	1,30100	72,610	3,0
11	2	0	2	1,23800	76,956	5,0
12	1	0	4	1,18120	81,405	3,0
13	2	0	3	1,09290	89,630	10,0
14	2	1	0	1,06390	92,777	4,0
15	2	1	1	1,04220	95,311	10,0
16	1	1	4	1,01580	98,632	5,0
17	2	1	2	0,98480	102,923	4,0
18	1	0	5	0,97640	104,169	7,0
19	2	0	4	0,95550	107,448	1,0
20	3	0	0	0,93820	110,378	4,0
21	2	1	3	0,90690	116,288	12,0
22	3	0	2	0,88260	121,562	6,0
23	0	0	6	0,86750	125,234	1,0
24	2	0	5	0,83690	133,975	6,0
25	1	0	6	0,82900	136,618	2,0
26	2	1	4	0,82370	138,511	2,0
27	2	2	0	0,81250	142,905	5,0

Stick Pattern

