Name and formula

Reference code: 01-081-2266

ICSD name: Aluminum Oxide

Empirical formula: Al_2O_3
Chemical formula: Al_2O_3

Crystallographic parameters

Crystal system: Rhombohedral
Space group: R-3c
Space group number: 167

a (Å): 4.7540
b (Å): 4.7540
c (Å): 12.9820
Alpha (°): 90.0000
Beta (°): 90.0000
Gamma (°): 120.0000

Calculated density (g/cm^3): 4.00
Volume of cell (10^6 pm^3): 254.09
Z: 6.00

RIR: 1.02

Subfiles and Quality

Subfiles: Inorganic
Alloy, metal or intermetalic
Corrosion
Modelled additional pattern
Quality: Calculated (C)

Comments

ICSD collection code: 073724

References

Primary reference: *Calculated from ICSD using POWD-12++*, (1997)
Structure: Maslen, E.N., Streltsov, V.A., Streltsova, N.R., Ishizawa, N., Satow, Y., *Acta Crystallogr., Sec. B: Structural Science*, **49**, 973, (1993)

Peak list

No.	h	k	l	d [A]	2Theta[deg]	I [%]
1	0	1	2	3.47671	25.601	67.6
2	1	0	4	2.54879	35.182	100.0
3	1	1	0	2.37700	37.818	46.8
4	0	0	6	2.16367	41.711	0.5
5	1	1	3	2.08338	43.399	96.3
6	2	0	2	1.96223	46.228	1.5

7	0	2	4	1.73835	52.606	47.0
8	1	1	6	1.60006	57.556	91.4
9	2	1	1	1.54505	59.810	2.3
10	1	2	2	1.51323	61.200	3.4
11	0	1	8	1.50971	61.358	8.5
12	2	1	4	1.40316	66.593	35.3
13	3	0	0	1.37236	68.291	53.2
14	1	2	5	1.33475	70.495	1.1
15	2	0	8	1.27440	74.377	1.3
16	1	0	10	1.23811	76.948	15.0
17	1	1	9	1.23315	77.315	8.6
18	2	1	7	1.19207	80.509	0.8
19	2	2	0	1.18850	80.801	5.9
20	3	0	6	1.15890	83.316	0.6
21	2	2	3	1.14606	84.463	4.5
22	1	3	1	1.13748	85.250	0.3
23	3	1	2	1.12461	86.463	3.5
24	1	2	8	1.12316	86.602	2.8
25	0	2	10	1.09808	89.094	6.4

Stick Pattern