

Appendix A2

Name and formula

Reference code:	00-004-0686
Mineral name:	Lead, syn
Compound name:	Lead
Empirical formula:	Pb
Chemical formula:	Pb

Crystallographic parameters

Crystal system:	Cubic
Space group:	Fm-3m
Space group number:	225
a (Å):	4.9506
b (Å):	4.9506
c (Å):	4.9506
Alpha (°):	90.0000
Beta (°):	90.0000
Gamma (°):	90.0000
Calculated density (g/cm ³):	11.34
Measured density (g/cm ³):	11.36
Volume of cell (10 ⁶ pm ³):	121.33
Z:	4.00
RIR:	-

Subfiles and quality

Subfiles:	Alloy, metal or intermetallic Common Phase Educational pattern Forensic Inorganic Mineral NBS pattern
Quality:	Star (S)

Comments

Color:	Light gray metallic
Creation Date:	1/1/1970
Modification Date:	1/1/1970
Color:	Light gray metallic
Sample Source or Locality:	Sample obtained from American Smelting and Refining Company
Sample Preparation:	It was annealed for 1 hour and 180 C in petrolatum
Analysis:	Spectrographic analysis shows faint traces of Bi and Mg. Purity >99.999%

Temperature of Data Collection: Pattern taken at 26 C.

References

Primary reference: Swanson, Tatge., *Natl. Bur. Stand. (U.S.), Circ. 539, I, 34, (1953)*

Peak list

No.	h	k	l	d [Å]	2Theta[deg]	I [%]
1	1	1	1	2.85500	31.306	100.0
2	2	0	0	2.47500	36.267	50.0
3	2	2	0	1.75000	52.230	31.0
4	3	1	1	1.49300	62.121	32.0
5	2	2	2	1.42900	65.238	9.0
6	4	0	0	1.23800	76.956	2.0
7	3	3	1	1.13590	85.397	10.0
8	4	2	0	1.10690	88.199	7.0
9	4	2	2	1.01050	99.334	6.0
10	5	1	1	0.95260	107.924	5.0
11	4	4	0	0.87520	123.319	1.0
12	5	3	1	0.83690	133.975	9.0
13	6	0	0	0.82510	138.001	4.0

Stick Pattern

