

ภาคผนวก ก

ข้อมูลการเลี้ยวเบนรังสีเอกซ์ของโลหะเงิน

JCPDS NO. 00-004-0783**Name and formula**

Reference code:	00-004-0783
Mineral name:	Silver-3C, syn
PDF index name:	Silver
Empirical formula:	Ag
Chemical formula:	Ag

Crystallographic parameters

Crystal system:	Cubic
Space group:	Fm-3m
Space group number:	225
a (Å):	4.0862
b (Å):	4.0862
c (Å):	4.0862
Alpha (°):	90.0000
Beta (°):	90.0000
Gamma (°):	90.0000
Calculated density (g/cm ³):	10.50
Measured density (g/cm ³):	10.50
Volume of cell (10 ⁶ pm ³):	68.23
Z:	4.00
RIR:	5.20

Subfiles and Quality

Subfiles:	Inorganic
	Mineral
	Alloy, metal or intermetallic
	Common Phase
	Educational pattern

Forensic
NBS pattern
Quality: Indexed (I)

Comments

Color: Light gray metallic
General comments: Purity >99.999%.
Opaque mineral optical data on specimen from Great Bear Lake, Canada: $RR_2R_e=94.1$, $Disp.=16$, $VHN_{100}=55-63$, Color values .314, .321, 94.2, Ref.: IMA Commission on Ore Microscopy QDF.
Sample source: Sample obtained from Johnson Matthey Company, Ltd.
Analysis: Spectrographic analysis indicated faint traces of Ca, Fe and Cu.
Optical data: $B=0.181$
Additional pattern: See ICSD 64706 (PDF 87-597).
Melting point: 960.6 ± 0.3
Temperature: Pattern taken at 27 C.

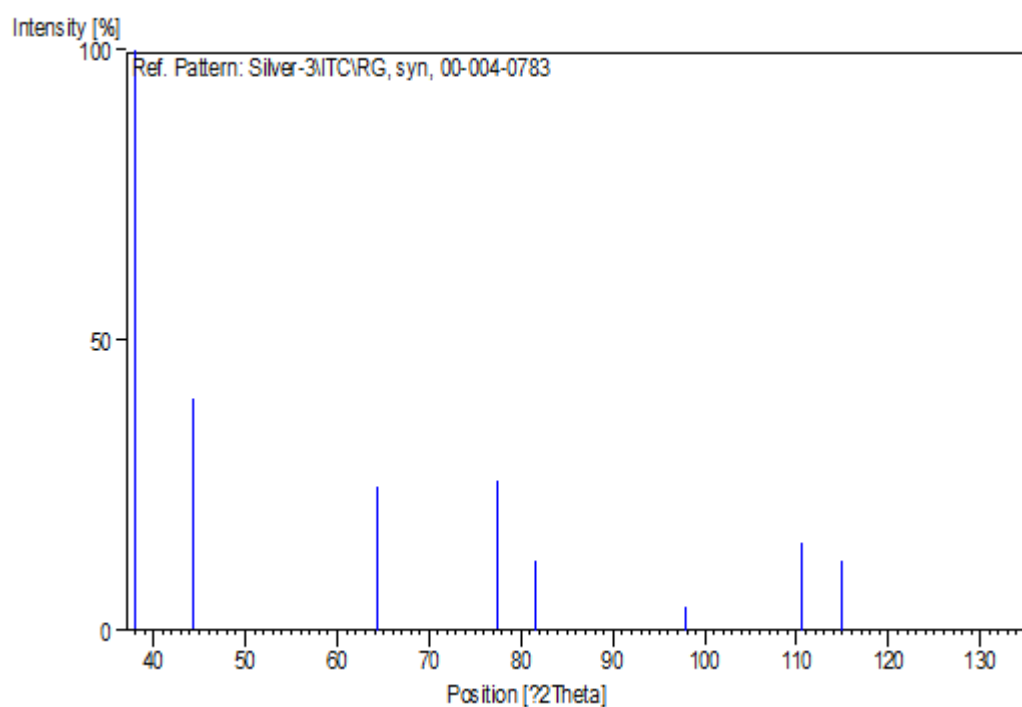
References

Primary reference: Swanson, Tatge., *Natl. Bur. Stand. (U.S.), Circ. 539*, **I**, 23, (1953)
Optical data: Winchell., *Elements of Optical Mineralogy*, **II**, 17

ตารางที่ ก.1 Peak list

No.	h	k	l	d (Å)	2θ (deg)	I (%)
1	1	1	1	2.35900	38.117	100.0
2	2	0	0	2.04400	44.279	40.0
3	2	2	0	1.44500	64.428	25.0
4	3	1	1	1.23100	77.475	26.0
5	2	2	2	1.17960	81.539	12.0
6	4	0	0	1.02150	97.891	4.0
7	3	3	1	0.93750	110.501	15.0
8	4	2	0	0.91370	114.928	12.0
9	4	2	2	0.83410	134.890	13.0

Stick Pattern



รูปที่ ก.1ฐานข้อมูลการเลี้ยวเบนรังสีเอกซ์ของโลหะเงิน JCPDS หมายเลข 00-004-0783