

Pattern: PDF 05-0626 Radiation: 1.54060 Quality: Star (*)

Formula Ba Ti O3		d	2θ	I	h	k	l
Name Barium Titanium Oxide		4.03000	22.0388	12	0	0	1
Name (mineral)		3.99000	22.2626	25	1	0	0
Name (common)		2.83800	31.4980	100	1	0	1
		2.82500	31.6467	100	1	1	0
		2.31400	38.8882	46	1	1	1
		2.01900	44.8564	12	0	0	2
		1.99700	45.3780	37	2	0	0
		1.80200	50.6141	6	1	0	2
		1.79000	50.9777	8	2	0	1
		1.78600	51.1000	7	2	1	0
		1.64200	55.9548	15	1	1	2
		1.63400	56.2530	35	2	1	1
		1.41900	65.7553	12	2	0	2
		1.41200	66.1229	10	2	2	0
		1.33700	70.3591	5	2	1	2
		1.33200	70.6626	2	3	0	0
		1.27500	74.3364	5	1	0	3
		1.26400	75.0944	7	3	0	1
		1.26300	75.1641	9	3	1	0
		1.21400	78.7679	3	1	1	3
		1.20500	79.4723	5	3	1	1
		1.15690	83.4922	7	2	2	2
		1.11940	86.9655	1	2	0	3
		1.11610	87.2873	1	3	0	2
		1.10820	88.0690	1	3	2	0
		1.07460	91.5859	7	2	1	3
		1.07030	92.0602	12	3	1	2
		1.06790	92.3275	12	3	2	1
		1.00930	99.4946	1	0	0	4
		0.99840	100.9838	2	4	0	0
		0.97840	103.8689	1	1	0	4
		0.97420	104.5020	1	2	2	3
		0.97100	104.9911	1	3	2	2
		0.96860	105.3618	1	4	1	0
		0.95060	108.2564	3	1	1	4
		0.94650	108.9457	1	3	0	3
		0.94190	109.7333	5	4	1	1
		0.92080	113.5562	2	3	1	3
		0.91660	114.3623	2	3	3	1
		0.90100	117.5060	3	2	0	4
Lattice: Tetragonal S.G.: P4mm (99)		Mol. weight = 233.23 Volume [CD] = 64.41 Dx = Dm = I/Icor = 8.340					
a = 3.99400 b = c = 4.03800 a/b = 1.00000 c/b = 1.01102	alpha = beta = gamma = Z = 1						
Color: Colorless Additional Diffraction Line(s): Plus 10 additional reflections Sample Source Or Locality: Sample from National Lead Company Sample Preparation: Annealed at 1480 C in MgO Analysis: Spectroscopic analysis: <0.1% Bi, Sr; <0.01% Al, Ca, Fe, Mg, Pb, Si; <0.001% Mn, Sn General Comments: Inverts to cubic form at 120 C Temperature Of Data Collection: X-ray pattern at 26 C General Comments: Merck Index, 8th Ed., p. 122							
Primary Reference Publication: Natl. Bur. Stand. (U.S.), Circ. 539 Detail: volume 3, page 45 (1954) Authors: Swanson, Fuyat.							
Radiation: CuKα1 Wavelength: 1.54060 SS/FOM: 19 (0.049,32)	Filter: F d-spacing:						