

No. 35A-13 TlTiOPO₄, Thallium titanyl phosphate (TTP)
 ($M = 363.23$)

1a	Ferroelectricity of TlTiOPO ₄ was proposed by Voronkova et al. in 1985.		85Vor, 88Vor	
b	phase	II	I	
	state	(F)	P	
	crystal system	orthorhombic	orthorhombic	
	space group	Pna2 ₁ –C _{2v} ⁹	Pnan–D _{2h} ⁶	90Har
	Θ[°C]	581(2)		85Vor
	<i>P</i> _s [001] .			88Vor
	<i>T</i> _{melt} = 1035 K.			88Vor
	ρ _X = 5.44 · 10 ³ kg m ^{–3} .			90Har
	See also Table 35A-6-001 in No. 35A-6.			
	Color: transparent and colorless.			
2a	Sample preparation: simple reaction flux methods. See also		71Mas 86EIB	
3a	Unit cell parameters. <i>a</i> = 12.983 Å, <i>b</i> = 6.490 Å, <i>c</i> = 10.578 Å, <i>V</i> = 891.3 Å ³ ; see also Table 35A-6-001 in No. 35A-6, Table 35B-1-006 in No. 35B-1.		71Mas	
b	Crystal structure: see Table 35A-6-007 in No. 35A-6 and		90Har	
5a	Curie-Weiss constant <i>C</i> = 65 K. Dielectric constant: Fig. 35A-13-001; see also Fig. 35A-6-013 in No. 35A-6.		88Vor	
8a	Elastic constants determined by Brillouin scattering: see Table 35A-6-012 in No. 35A-6.			
9e	Nonlinear optical properties: Fig. 35A-13-002; see also Table 35B-1-006 in No. 35B-1.			
10a	Raman scattering: Table 35A-13-001; Fig. 35A-13-003, Fig. 35A-13-004, Fig. 35A-13-005, Fig. 35A-13-006, Fig. 35A-13-007, Fig. 35A-13-008, Fig. 35A-13-009, Fig. 35A-13-010, Fig. 35A-13-011; see also Fig. 35A-6-065, Fig. 35A-6-069 in No. 35A-6.			
b	Brillouin scattering: see 8a.			