

No. 35A-19 TlSbOGeO₄, Thallium antimonyl germanate
 ($M = 478.75$)

1a	Ferroelectricity in TlSbOGeO ₄ was suggested by Mill' et al. in 1991.		91Mil	
b	phase	II	I	
	state	(F)	P	
	crystal system	orthorhombic	orthorhombic	
	space group	Pna2 ₁ –C _{2v} ⁹	Pnan–D _{2h} ⁶	91Bel
	Θ [K]	272(5)		91Mil
	ρ _X = 6.641 · 10 ³ kg m ^{–3} .			91Mil
2a	Crystal growth: flux method (Tl ₂ O–Sb ₂ O ₅ –GeO ₂). See also		92Bel 91Bel	
3a	Unit cell parameters: <i>a</i> = 13.351(5) Å, <i>b</i> = 6.678(2) Å, <i>c</i> = 10.768 (4) Å, <i>V</i> = 960.06 Å ³ at RT.		91Bel	
b	<i>Z</i> = 8. Crystal structure: Table 35A-19-001, Table 35A-19-002, Table 35A-19-003, Table 35A-19-004.			
4	Variations of unit cell parameters with temperature: <i>a</i> = 13.368(3) Å, <i>b</i> = 6.669(2) Å, <i>c</i> = 10.767(3) Å, <i>V</i> = 960(1) Å ³ at <i>T</i> = 253 K; <i>a</i> = 13.331(2) Å, <i>b</i> = 6.659(1) Å, <i>c</i> = 10.740(2) Å, <i>V</i> = 953(1) Å ³ at <i>T</i> = 280 K.		94Bel	
9e	Nonlinear optical properties: <i>I</i> _{2ω} / <i>I</i> _{2ω} (SiO ₂) = 0.05; Fig. 35A-19-001.		91Mil	