

No. M27-ii $\text{TiNbWO}_6 \cdot n \text{H}_2\text{O}$ ($n = 0.24$)

1a	Sleight et al. reported in 1978 that noncentrosymmetric noncubic phase of TiNbWO_6 at room temperature changes to a centrosymmetric phase at about 320 K. Possibility of ferroelectricity in $\text{TiNbWO}_6 \cdot 0.24 \text{H}_2\text{O}$ was suggested by Stefanovich et al. in 1985.	78Sle 85Ste
b	Pseudocubic at RT. $\rho = 6.87 \cdot 10^3 \text{ kg m}^{-3}$, $\rho_X = 6.91 \cdot 10^3 \text{ kg m}^{-3}$.	85Ste 85Ste
2a	Crystal growth: flux method. Ternary system $\text{Ti}_2\text{O}-\text{Nb}_2\text{O}_5-\text{WO}_3$ was used.	85Ste
3a	Unit cell parameters: $a = 10.350 \text{ \AA}$ at RT.	85Ste
b	Pyrochlore-like structure.	79Fou
5a	Dielectric constant at 10 MHz: see Fig. M27-i-001 in No. M27-i.	
9e	Optical second harmonic generation can be observed at RT. It falls rapidly on heating to 320 K; see also Fig. M27-i-002 in No. M27-i. When the crystal is dehydrated at 870 K, the SHG signal at RT decreases.	86Ast 86Ast
11	Activation energy of the ionic conductivity: $E \approx 0.23 \text{ eV}$, $T < \Theta (\approx 320 \text{ K})$; $E \approx 0.12 \text{ eV}$, $T > \Theta$.	86Ast
15a	Domain structure: wedge shaped domains along [110] plane were observed by polarized light.	85Ste, 86Ast