

No. 35A-4 $\text{NH}_4\text{TiOPO}_4$, Ammonium titanyl phosphate
 ($M = 176.89$)

1b	Orthorhombic, $\text{Pna}2_1-\text{C}_{2v}^9$ at RT. $\rho_x = 1.99 \cdot 10^3 \text{ kg m}^{-3}$. Transparent and colorless.	89Phi 89Phi 88Edd
2a	Crystal growth: hydrothermal method.	88Edd
3a	$a = 12.915(2) \text{ \AA}$, $b = 6.492(1) \text{ \AA}$, $c = 10.597(2) \text{ \AA}$, $V = 888.57 \text{ \AA}^3$. See also Table 35B-1-006 in No. 35B-1.	89Phi
b	Bond lengths : Ti(1) – O(9) $1.967(3) \text{ \AA}$ Ti 1) – O(10) $1.717(3) \text{ \AA}$ Ti(2) – O(9) $1.742(4) \text{ \AA}$ Ti(2) – O(10) $2.096(4) \text{ \AA}$. See also Table 35A-6-006, Table 35A-6-007 in No. 35A-6.	
9e	SHG: 2400 times that of quartz; see also Table 35B-1-006 in No. 35B-1.	
16	Isomorphous derivatives, $\text{NH}_4\text{H}(\text{TiOPO}_4)_2$ and $\text{NH}_4\text{H}_3\text{O}(\text{TiOPO}_4)_2$ from this crystal.	88Edd, 89Phi