

**No. 33B-5 RbH<sub>2</sub>PO<sub>4</sub>–NH<sub>4</sub>H<sub>2</sub>PO<sub>4</sub> (RDP–ADP, RADP)**

1a	Dielectric and birefringence studies were done by Courtens et al. in 1982.	82Cou
b	$\Theta$ – $x$ phase diagram of Rb <sub>1–<math>x</math></sub> (NH <sub>4</sub> ) <sub><math>x</math></sub> H <sub>2</sub> PO <sub>4</sub> : Fig. 33B-5-001. $p$ – $T$ phase diagram for Rb <sub>1–<math>x</math></sub> (NH <sub>4</sub> ) <sub><math>x</math></sub> H <sub>2</sub> PO <sub>4</sub> ( $x = 0.25$ ): Fig. 33B-5-002.	
3a	Unit cell parameters: Fig. 33B-5-003.	
4	Temperature dependence of lattice constants: Fig. 33B-5-004.	
5a	Temperature dependence of dielectric constant: Fig. 33B-5-005, Fig. 33B-5-006, Fig. 33B-5-007, Fig. 33B-5-008, Fig. 33B-5-009. Effect of hydrostatic pressure: Fig. 33B-5-010. Dielectric constant and loss tangent below 1 K: Fig. 33B-5-011, Fig. 33B-5-012. Dielectric dispersion of undeuterated crystals: Fig. 33B-5-013, Fig. 33B-5-014, Fig. 33B-5-015, Fig. 33B-5-016. Dielectric dispersion of deuterated crystals: Fig. 33B-5-017, Fig. 33B-5-018, Fig. 33B-5-019, Fig. 33B-5-020, Fig. 33B-5-021. Dielectric dispersion of partially deuterated crystals: Fig. 33B-5-022, Fig. 33B-5-023, Fig. 33B-5-024, Fig. 33B-5-025. Dielectric constant and dielectric loss in far-infrared region: see Fig. 33B-5-036, Fig. 33B-5-038, Fig. 33B-5-039 in 9a.	
6a	Heat capacity of Rb <sub>1–<math>x</math></sub> (NH <sub>4</sub> ) <sub><math>x</math></sub> H <sub>2</sub> PO <sub>4</sub> ( $x = 0.35$ ) below 2 K: Fig. 33B-5-026. $c_p = 3.635 \cdot 10^{-3} T^2 + 3.643 T$ [J kg <sup>–1</sup> K <sup>–1</sup> ] for Rb <sub>0.52</sub> (ND <sub>4</sub> ) <sub>0.48</sub> D <sub>2</sub> PO <sub>4</sub> in the region 1.5 K < $T$ < 30 K. Heat capacity of Rb <sub>1–<math>x</math></sub> (NH <sub>4</sub> ) <sub><math>x</math></sub> H <sub>2</sub> PO <sub>4</sub> ( $x = 0.11, 0.26$ ): see	85Law 85Mor
b	Thermal conductivity: see	85Law
8a	Elastic compliance and stiffness: Fig. 33B-5-027, Fig. 33B-5-028, Fig. 33B-5-029. Ultrasonic velocity: Fig. 33B-5-030.	
9a	Refractive indices: Fig. 33B-5-031. Birefringence: Fig. 33B-5-032. Reflectivity in infrared and far-infrared regions: Table 33B-5-001; Fig. 33B-5-033, Fig. 33B-5-034, Fig. 33B-5-035, Fig. 33B-5-036, Fig. 33B-5-037, Fig. 33B-5-038, Fig. 33B-5-039.	
10a	Raman scattering: Table 33B-5-002; Fig. 33B-5-040, Fig. 33B-5-041, Fig. 33B-5-042, Fig. 33B-5-043, Fig. 33B-5-044, Fig. 33B-5-045, Fig. 33B-5-046, Fig. 33B-5-047, Fig. 33B-5-048, Fig. 33B-5-049, Fig. 33B-5-050, Fig. 33B-5-051.	
b	Brillouin scattering: Fig. 33B-5-052, Fig. 33B-5-053, Fig. 33B-5-054. Central peak: see	86Cou1
13a	NMR spectra: Fig. 33B-5-055, Fig. 33B-5-056. Spin-lattice and spin-spin relaxation times: Fig. 33B-5-057, Fig. 33B-5-058, Fig. 33B-5-059, Fig. 33B-5-060, Fig. 33B-5-061; see also	84Bli, 88Bli
	Nuclear quadrupole coupling constant: Fig. 33B-5-062, Fig. 33B-5-063. Edwards-Anderson order parameter: see	90Che, 95Sel
b	ESR of Ti <sup>2+</sup> : Fig. 33B-5-064, Fig. 33B-5-065, Fig. 33B-5-066, Fig. 33B-5-067; see also	90Cev, 90Gri

### 33 KDP (KH<sub>2</sub>PO<sub>4</sub>) family

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ESR of AsO <sub>4</sub> <sup>4-</sup> : Table 33B-5-003; Fig. 33B-5-068, Fig. 33B-5-069; see also	94Kah
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14b Neutron diffuse or inelastic scattering: Fig. 33B-5-070, Fig. 33B-5-071, Fig. 33B-5-072, Fig. 33B-5-073, Fig. 33B-5-074, Fig. 33B-5-075. Neutron quasielastic scattering: see	86Gri1
X-ray diffuse scattering in the glass phase: Broad peak of diffuse scattering is found in Rb <sub>1-x</sub> (NH <sub>4</sub> ) <sub>x</sub> H <sub>2</sub> PO <sub>4</sub> at $q = 0.32a^*$ for $x = 0.49$ , and $q = 0.35a^*$ for $x = 0.68$ and $0.73$ in the glass phase. See also	85Cow  85Hay1, 85Hay2, 85Ter, 86Cow, 87Ami, 87Hay, 89Ami
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