

39B Solid solutions**No. 39B-1 (NH₄)₂SO₄–K₂SO₄**

1b	Concentration dependence of Θ_f : Fig. 39B-1-001; see also	86Dej
2a	Relation of concentrations in crystal to those in saturated solutions: Fig. 39B-1-002.	
3a	Unit cell parameters of [(NH ₄) _{1-x} K _x] ₂ SO ₄ at 293K: $x = 0.30$: $a = 7.738(1) \text{ \AA}$, $b = 10.373(2) \text{ \AA}$, $c = 5.905(1) \text{ \AA}$; $x = 0.70$: $a = 7.6134(6) \text{ \AA}$, $b = 10.131(2) \text{ \AA}$, $c = 5.8107(5) \text{ \AA}$. Concentration dependence of unit cell parameters: Fig. 39B-1-003, Fig. 39B-1-004; see also	77Shi 86Dej
b	Crystal structure: Table 39B-1-001. Occupation parameters of NH ₄ ions in different sites: Fig. 39B-1-005.	
5a	Dielectric constant: Fig. 39B-1-006. Curie Weiss law of [(NH ₄) _{0.7} K _{0.3}] ₂ SO ₄ : $\kappa_c = \kappa_\infty + C/(T - \Theta_p)$, $T > \Theta_f$, with $C = 35 \text{ K}$, $\kappa_\infty = 9.5$, $\Theta_p = 207 \text{ K}$.	75Saw
c	Spontaneous polarization: Fig. 39B-1-007.	
9a	Birefringence: Fig. 39B-1-008.	
13a	NMR: Fig. 39B-1-009.	
b	ESR of γ -ray irradiated crystals: see	80Hir