29 $CsCd(NO_2)_3$ family

29A Pure compounds

No. 29A-1 $RbCd(NO_2)_3$, Rubidium cadmium trinitrite

(M = 335.90)

1a	Ferroelectricity in $RbCd(NO_2)_3$ was mentioned by Planta et al. in 1993.			93Pla
b	phase	II	I	93Pla
	state	(F)	P	
	crystal system	trigonal [a])	cubic	[a]) 79Nal
	space group	$R3-C_3^4$		
	Θ [K]	≈520		
	$\rho_X = 3.60 \cdot 10^3$ kg m^{-3} at RT.			79Nal
	Not hygroscopic.			79Nal
2a	Crystal growth: $RbCd(NO_2)_3$ was synthesized in aqueous solution of Rb_2SO_4, $CdSO_4$ and $Ba(NO_2)_2$. After removal of the precipitated $BaSO_4$, crystals were grown by slow evaporation method or temperature-lowering method. Multi-domain crystals were obtained.			93Pla
b	Crystal form: pseudocubic macrosymmetry with dominant {100}- and {110}-faces.			93Pla
3a	Unit cell parameters: a = 5.370(2) Å, α = 90.47(2)° at RT.			79Nal
b	Z = 1 in phase II.			79Nal
	Crystal structure: perovskite-like, see			79Nal, 93Pla
5a	Dielectric constant: see			93Pla
15a	Domain structure: see			93Pla