

No. 25A-3 RbMnBr₃, Rubidium tribromomanganate*(M* = 381.027)

1a	Ferroelectricity in RbMnBr ₃ was reported by Kato et al. in 1994.					94Kat
b	phase	V	IV	III	II	I
	state		F	F	F	
	crystal system				hexagonal	
	space group				P6 ₃ cm – C _{6v} ³	82Fin
	Θ [K]	220	230	444		
	Phase numbers are assigned so that isomorphous structures have the same number as in No. 25A-1, KNiCl ₃ . ($\Theta_{\text{I-II}}$ is supposed to be higher than T_{melt} , 727 K.)					
	$P_s \parallel c$.					94Kat
	$T_{\text{melt}} = 727$ K.					94Kat
	$\rho = 4.00 \cdot 10^3$ kg m ⁻³ .					82Fin
	Cleavage plane \parallel ac plane.					94Kat
	Phase I, II, III, IV corresponds to the phase II, III, IV, V of KNiCl ₃ , respectively.					94Kat
2a	Crystal growth: Bridgman method.					92Kat
3a	Unit cell parameters in phase II: $a = 12.924(2)$ Å, $c = 6.547(3)$ Å at RT.					82Fin
b	Crystal structure: Table 25A-3-001.					
5a	Dielectric constant: Fig. 25A-3-001.					
c	Spontaneous polarization: Fig. 25A-3-002.					
9a	Birefringence: Fig. 25A-3-003.					
	See also					94Kat