63 $(NH_2CH_2COOH)_2 \cdot MnCl_2 \cdot 2H_2O$

63A Pure compound

No. 63A-1 $(NH_2CH_2COOH)_2 \cdot MnCl_2 \cdot 2H_2O$, Diglycine manganese chloride dihydrate

(M = 312.008)

1a	Ferroelectric activity in $(NH_2CH_2COOH)_2 \cdot MnCl_2 \cdot 2H_2O$ was discovered by Pepinsky et al. in 1958.		58Pep
b	state	F *)	58Pep
	crystal system	monoclinic	
	space group	$P2_1 - C_2^2$	
	P_s || [010].		58Pep
	$\rho = 1.875_0 \cdot 10^3$ kg m^{-3} at 20 °C.		58Pep
	Transparent.		58Pep
	*) Transition to the paraelectric phase dose not exist up to the decomposition temperature.		
2a	Crystal growth: evaporation or cooling method from aqueous solution.		58Pep
3a	Unit cell parameters: a = 9.96 Å, b = 8.53 Å, c = 6.86 Å, β = 107.0(5)° at RT.		58Pep
b	Z = 2.		58Pep
5a	Dielectric constants: Fig. 63A-1-001. Dielectric constants at RT: κ_a = 6.6, κ_b = 8.1, κ_c = 7.4.		58Pep
c	Spontaneous polarization and coercive field: Fig. 63A-1-002, Fig. 63A-1-003.		

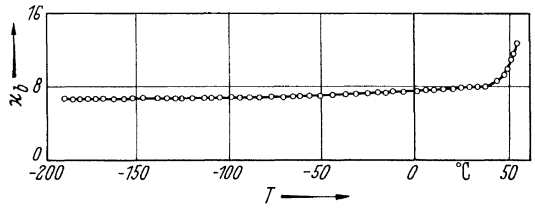

Fig. 63A-1-001. $(NH_2CH_2COOH)_2 \cdot MnCl_2 \cdot 2H_2O$. $\varkappa_b$ vs. T [58Pep].

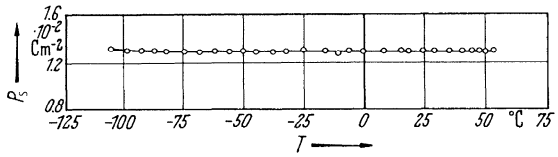

Fig. 63A-1-002. $(NH_2CH_2COOH)_2 \cdot MnCl_2 \cdot 2H_2O$. P_s vs. T [58Pep].

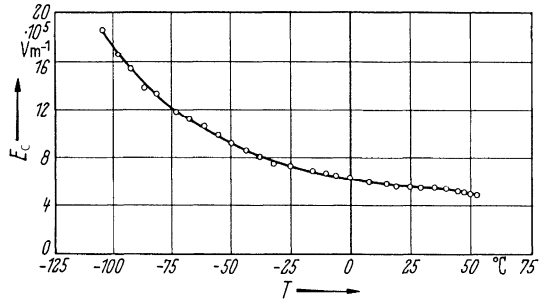

Fig. 63A-1-003. $(NH_2CH_2COOH)_2 \cdot MnCl_2 \cdot 2H_2O$. E_c vs. T [58Pep].

Reference

58Pep Pepinsky, R., Vedam, K., Oakaya, Y.: Phys. Rev. **110** (1958) 1309.