

No. 45A-8 CH₃NH₃Cr(SO₄)₂ · 12H₂O, Methylammonium chromium sulfate dodecahydrate
(*M* = 492.36)

1a	Ferroelectric activity in $\text{CH}_3\text{NH}_3\text{Cr}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$ was discovered by Pepinsky et al. in 1957.			57Pep
b	phase	II ^{a)}	I ^{a)}	^{a)} 57Pep
	state	F ^{a)}	P ^{a)}	^{b)} 65Wyc
	crystal system	orthorhombic ^{d)}	cubic ^{b)}	^{c)} 68Led
	space group	$\text{Pca}2_1\text{--C}_{2v}^5$ ^{d)}	$\text{Pa}3\text{--T}_h^6$ ^{c)}	^{d)} 70Led
	θ [°C]	–109 ^{a)}		
	$\rho = 1.650 \cdot 10^3 \text{ kg m}^{-3}$.			68Led
	See also			57Pep
	Transparent.			
2a	Crystal growth: evaporation or cooling method from aqueous solution.			57Pep
3a	Unit cell parameter: $a = 12.44(6) \text{ \AA}$.			68Led
	See also			57Pep
b	$Z = 4$ in phase I.			65Wyc
5a	Dielectric relaxation: Fig. 45A-8-001, Fig. 45A-8-002, Fig. 45A-8-003; see also Table 45A-4-002 in No. 45A-4.			
c	Spontaneous polarization and coercive field: $P_s = 1.0 \cdot 10^{-2} \text{ C m}^{-2}$, $E_c = 6 \cdot 10^5 \text{ V m}^{-1}$ at about 2 °C below θ_f ($f = 60 \text{ Hz}$).			57Pep
6a	Heat capacity: Fig. 45A-8-004. Transition entropy: $\Delta S_m = 9.70 \text{ J mol}^{-1} \text{ K}^{-1}$.			70Bun
13b	ESR: Table 45A-8-001.			