

No. 45A-9 CH₃NH₃Fe(SO₄)₂ · 12H₂O, Methylammonium iron sulfate dodecahydrate
(*M* = 496.21)

1a	Ferroelectric activity in CH ₃ NH ₃ Fe(SO ₄) ₂ · 12H ₂ O was discovered by Pepinsky et al. in 1957.			57Pep
b	phase	II	I	57Pep
	state	F	P	
	crystal system		cubic	
	Θ[°C]	−104		
	ρ = 1.647 · 10 ³ kg m ^{−3} at RT. Transparent.			57Pep
2a	Crystal growth: evaporation or cooling method from aqueous solution.			57Pep
3a	Unit cell parameter: a = 12.60 Å at 12 °C.			57Pep
5a	Dielectric constant: Fig. 45A-9-001, Fig. 45A-9-002.			
c	Spontaneous polarization and coercive field: P _s = 1.3 · 10 ^{−2} C m ^{−2} , E _c = 6 · 10 ⁵ V m ^{−1} at about 2 °C below Θ _f (f = 60 Hz).			57Pep
9b	Electrooptic effect: see Fig. 45A-6-015 in No. 45A-6 for the quadratic electrooptic effect.			
d	Optical activity: see Table 45A-4-004 in No. 45A-4. See Fig. 45A-6-017 in No. 45A-6 for the electrogyration coefficient.			