

No. 30A-4 CsNO₃, Cesium nitrate*(M* = 194.91)

1a	Pyroelectricity in CsNO ₃ was reported by Bury et al. in 1969.		69Bur
b	phase	II	I
	crystal system	trigonal	cubic
	space group	P3 ₁ –C ₃ ² or P3 ₂ –C ₃ ^{3 a)}	Pa3–T _h ^{6 b)}
	Θ [K]	427	
	<i>T</i> _{melt} = 677 K.		65Owe
	<i>ρ</i> _X = 3.635 · 10 ³ kg m ^{–3} .		60Swa
	Transparent, colorless.		
2a	Crystal growth: cooling from melt or evaporation of aqueous solution.		63Son
3a	Unit cell parameters:		
	<i>a</i> = 10.931(2) Å, <i>c</i> = 7.763(3) Å in phase II for the hexagonal cell. <i>T</i> = RT.		84Dea
	<i>a</i> = 8.980 Å in phase I. <i>T</i> = 166...169 °C.		53Kor
	Unit cell parameters in high-pressure phase III:		
	<i>a</i> = 5.837 Å, <i>b</i> = 5.143 Å, <i>c</i> = 4.978 Å. <i>T</i> = RT, <i>p</i> = 4.5 GPa.		79Kal
b	<i>Z</i> = 9 in phase II for the hexagonal unit cell.		60Swa
	<i>Z</i> = 8 in phase I.		53Kor
	Crystal structure: Table 30A-4-001, Table 30A-4-002; Fig. 30A-4-001;		
	see also		83Luc
5a	Dielectric constant: Fig. 30A-4-002; see also		63Son, 72Fer
	Phase diagram with regard to <i>p</i> : Fig. 30A-4-003, Fig. 30A-4-004.		
d	Pyroelectricity: Fig. 30A-4-005.		
6a	Heat capacity: Fig. 30A-4-006; see also		75Mar, 81Flo, 83Ich 79Bar
	Transition heat: Δ <i>Q</i> _m = 3.3(2) · 10 ³ J mol ^{–1} .		
b	Thermal conductivity: Fig. 30A-4-007.		
7a	Piezoelectricity: Fig. 30A-4-008.		
8a	Elastic stiffnesses: see Table 30A-2-011 in No. 30A-2.		
9a	Infrared absorption: see		79Fer
b	Optical rotatory power: Fig. 30A-4-009.		
10a	Raman scattering: see		73Bro, 74Bad, 79Owe, 81Ada, 82Med
b	Brillouin scattering: Fig. 30A-4-010.		
11	Electrical conduction: Fig. 30A-4-011.		
	ac conductivity: Fig. 30A-4-012, Fig. 30A-4-013, Fig. 30A-4-014.		