

No. M20-ii KOH, Potassium hydroxide $(M = 56.11; [D: 57.11])$

1a	Dielectric anomalies associated with the phase transitions at $\Theta_{\text{III-II}}$ in KOH and KOD were observed and possibility of antiferroelectricity was mentioned by Bastow et al. in 1986.			86Bas	
b	phase	III	II	I ^{a)}	86Bas
	state	(A)	P		^{a)} 87Mac
	crystal system	monoclinic	monoclinic	cubic ^{a)}	
	space group	$P2_1/a - C_{2h}^4$	$P2_1/m - C_{2h}^2$	$Fm3m - O_h^5$ ^{a)}	
	Θ [K]	226.7 ^{b)} [D: 253.1] ^{b)} [D: 523] ^{a)}			^{b)} 88Whi
$\rho_X = 2.110 \cdot 10^3 \text{ kg m}^{-3}$.					85Jac
3a	Unit cell parameters: $a = 3.957(5) \text{ \AA}$, $b = 3.995(1) \text{ \AA}$, $c = 5.742(2) \text{ \AA}$, $\beta = 103.93(8)^\circ$ at 294 K. $a = 3.951 \text{ \AA}$, $b = 3.999 \text{ \AA}$, $c = 5.750 \text{ \AA}$, $\beta = 103.58^\circ$ at 293 K. $a = 7.892 \text{ \AA}$, $b = 3.945 \text{ \AA}$, $c = 5.947 \text{ \AA}$, $\beta = 65.76^\circ$ at 77 K. See also				85Jac 86Bas 86Bas 87Mac
b	$Z = 4$ in phase I of KOD, $Z = 2$ in phase II, $Z = 4$ in phase III. Crystal structure: Table M20-ii-001, Table M20-ii-002; Fig. M20-ii-001; see also				87Mac 85Jac 86Bas 87Mac
4	Thermal expansion: see				87Mac
5a	Dielectric constant: Fig. M20-ii-002.				
6a	Specific heat: Fig. M20-ii-003. Transition heat ΔQ_m and transition entropy ΔS_m at $\Theta_{\text{III-II}}$:				88Whi
		$\Delta Q_m [\text{J mol}^{-1}]$	$\Delta S_m [\text{J K}^{-1} \text{ mol}^{-1}]$		
	KOH	222(3)	1.006(17)		
	KOD	257(2)	1.046(6)		
13a	NMR of proton: see NMR of ^2H and ^{39}K : see Spin-lattice relaxation time: Fig. M20-ii-004.				85Amm 91Bas