

Table 43A-15-001. Tl₂Cd₂(SO₄)₃. Lines of Raman spectra [cm⁻¹] [79Rab]. X' , Y' || $\langle 110 \rangle$.

Attribution	I; ($T = 25^\circ\text{C}$)				II; ($T = -148^\circ\text{C}$)				III; ($T = -160^\circ\text{C}$)				IV; ($T = -185^\circ\text{C}$)	
	Z(XX)Y	Z(Y'X')Y'	Z(YZ)X	Z(XZ)Y	Z(YX)Y	Z(XX)Y	Z(XX)Y	Z(XX)Y	Z(XX)Y	Z(XX)Y	Z(XX)Y	Z(X_Z^X)Y		
	A + E	E	F, x	F, y	F, z	A	A	A	A	A	B	B		
Lattice vibrations	17	17				10.5	11							
			33.5	33	33							33		
	35	35				34	34		35					
			42	41	42				42 a.t.					
	a.t.	45				49?	44?					47		
			51	51	51		51		54					
	66 a.t.?					65 a.t.	62?					59		
					70 v.b.?							72		
	75	74				77	78					a.t.		
												84		
	90	90				92	92		94			96 a.t.		
												98		
	111 a.t.?					110 a.t.			110					
							120		120			124		
		133												
	136					142	142					137		
				153			157					155		
												184?		
												193?		
	205.5					211	211		211			211		
												222		
												229?		
												399?		
												414		
	432					427	430					425		
			436	436	436	433	436					433?		

(continued)

Table 43A-15-001 (continued)

Attribution	I; (T = 25 °C)				II; (T = -148 °C)				III; (T = -160 °C)				IV; (T = -185 °C)			
	Z(XX)Y	Z(Y'X')Y'	Z(YZ)X	Z(XZ)Y	Z(YX)Y	F, z	Z(XX)Y	Z(XX)Y	Z(XX)Y	Z(XX)Y	Z(XX)Y	Z(X ^X _Z)Y	Z(X ^X _Z)Y	Z(X ^X _Z)Y	Z(X ^X _Z)Y	Z(X ^X _Z)Y
$\nu_2(\text{SO}_4^{2-})$	A + E	E		F, x	F, y											
	453	453.5		454	454	454	454									
	459						462									
	593	592	593	593	593	593	589									
$\nu_4(\text{SO}_4^{2-})$	665.5	665.5														
			609	607	666											
	612						609									
	627	628	615	613	613	613	630									
			628	627	628	628										
$\nu_1(\text{SO}_4^{2-})$			635	633	635 a.t.											
	1014						1008 a.t.									
	1073	1073		1073	1073	1073	1015									
			1075				1016									
			1087	1085			1071									
$\nu_3(\text{SO}_4^{2-})$		1088 a.t.					1086									
	1092						1095									
							a.t.									
	1118	1119					1100 v.b.									
			v.b.	1124	1123	1123	1131									
a.t.: asymmetry on tail of line; ?: presence of line doubtful; v.b.: very broad band.																