

Species Tag:	51003	Name:	ClO-v1
Version:	1		Chlorine monoxide,
Date:	Jan. 1991		X $^2\Pi$ states, $v = 1$
Contributor:	E. A. Cohen		

Lines Listed:	2112	Q(300.0)=	3349.655
Freq. (GHz) <	2881	Q(225.0)=	2307.810
Max. J:	81	Q(150.0)=	1424.624
LOGSTR0=	-9.9	Q(75.00)=	689.287
LOGSTR1=	-11.6	Q(37.50)=	351.318
Isotope Corr.:	-0.122	Q(18.75)=	183.316
Egy. ( $\text{cm}^{-1}$ ) >	844.2	Q(9.375)=	99.701
$\mu_a =$	1.2758	A=	
$\mu_b =$		B=	18423.566
$\mu_c =$		C=	

The experimental lines are from R. K. Kakar, E. A. Cohen, and M. Geller, 1978, *J. Mol. Spect.* **70**, 243, and E. A. Cohen, H. M. Pickett and M. Geller, 1984, *J. Mol. Spect.* **106**, 430. The millimeter and submillimeter data were combined with the FT infrared data of J. B. Burkholder *et al.*, 1987, *J. Mol. Spect.* **124**, 139, in a simultaneous fit to both vibrational states. The partition function is a sum over the ground and first vibrational state up to  $F = 90$  for both the  $\Omega = 3/2$  and  $\Omega = 1/2$  states. The dipole moment is from D. Yaron, K. Peterson, and W. Klemperer, 1988, *J. Chem. Phys.* **88**, 4702.