

Species Tag:	48004	Name:	O3
Version:	4		Ozone,
Date:	Nov 2005		ground vibrational
Contributor:	B. J. Drouin		state
	H. M. Pickett		
Lines Listed:	7133	Q(300.0)=	3553.040
Freq. (GHz) <	8908	Q(225.0)=	2230.489
Max. J:	80	Q(150.0)=	1198.671
LOGSTR0=	-9.8	Q(75.00)=	423.448
LOGSTR1=	-10.0	Q(37.50)=	150.038
Isotope Corr.:	0.0	Q(18.75)=	53.297
Egy. (cm <sup>-1</sup> ) >	0.0	Q(9.375)=	19.037
$\mu_a$ =		A=	106536.224
$\mu_b$ =	0.5337	B=	13349.254
$\mu_c$ =		C=	11834.361

The ozone spectrum was fitted using the microwave, millimeter, far-infrared, and infrared transitions given in H. M. Pickett *et al.*, (1985), *J. Mol. Spect.* **110**, 186, H. M. Pickett *et al.*, (1988), *J. Mol. Spect.* **128**, 151, De Natale *et al.*, (1997), *Appl. Op.* **36**, 8526, and Colmont *et al.*, (2005), *J. Mol. Spec.* **233**, 203. The dipole moment is from K. M. Mack and J. S. Muentner, (1977) *J. Chem. Phys.* **66**, 15. Line strengths were calculated using Herman Wallis parameters fitted to match intensities from a model Hamiltonian in which the ground state and the three fundamentals were coupled with theoretical matrix elements, and infrared transition dipoles were allowed to mix with the permanent dipole. This treatment gives the correct perturbation of the rotational intensities due to centrifugal distortion. Comparisons of calculated intensities agree within  $2\sigma$  to those of M. Birk, G. Wagner and J-M. Flaud, (1994), *J. Mol. Spec.* **163**, 245-261. The partition includes contributions from all vibrational states.