

Species Tag:	34001	Name:	O-18-O
Version:	3		Molecular oxygen,
Date:	Feb. 1996		single substituted
Contributor:	E. A. Cohen		¹⁸ O isotope
Lines Listed:	400	Q(300.0)=	461.087
Freq. (GHz) <	5961	Q(225.0)=	345.728
Max. J:	57	Q(150.0)=	230.431
LOGSTR0=	-31.3	Q(75.00)=	115.215
LOGSTR1=	-15.0	Q(37.50)=	57.680
Isotope Corr.:	-2.389	Q(18.75)=	29.017
Egy. (cm ⁻¹) >	-0.6	Q(9.375)=	14.863
μ_a =	magnetic	A=	
μ_b =		B=	40708.
μ_c =		C=	

The measurements are from T. Amano and E. Hirota, 1974, J. Mol. Spect. **53**, 346. W. Steinbach and W. Gordy, 1975, Phys. Rev. **A11**, 729, and R. L. Crownover, F. C. De Lucia and E. Herbst, 1990, Astrophys.J. **349**, L29. The calculation included the high resolution spectrum of the $a^1\Delta - X^3\Sigma$ band, J. Brault, unpublished, and two microwave transitions from the $a^1\Delta$ state from E. A. Cohen, M. Okunishi, and J. J. Oh, J. Mol. Struct. **352/353**, 283. Intensities of magnetic dipole transitions have been calculated using the g values obtained from magnetic resonance by K. D. Bowers, R. A. Kamper, and C. D. Lustig, 1959, Proc. Roy. Soc. London **A251**, 565. The zero-frequency absorption is included but the frequency is set to a synthetic frequency of |g| J for the given level.