

Species Tag:	18001	Name:	OD
Version:	2		Hydroxyl radical
Date:	June 2013		X $^2\Pi$ states
Contributor:	B. J. Drouin		v = 0,1,2
Lines Listed:	9351	Q(300.0)=	212.4398
Freq. (GHz) <	70000	Q(225.0)=	153.3887
Max. J:	50	Q(150.0)=	97.47377
LOGSTR0=	-30.0	Q(75.00)=	48.96589
LOGSTR1=	-35.0	Q(37.50)=	30.89884
Isotope Corr.:	0.0	Q(18.75)=	25.02242
Egy. (cm <sup>-1</sup> ) >	0.0	Q(9.375)=	24.00854
$\mu_a$ =	1.65520	A=	
$\mu_b$ =		B=	556174.
$\mu_c$ =		C=	

The positions and energies are determined from a multi-isotopic analysis of ground and v < 2 data as described in B.J. Drouin.JCPA 2012, DOI: 10.1021/jp400923z and references therein.

The dipole moment is from K. I. Peterson, G. T. Fraser, and W. A. Klemperer, 1984, Can. J. Phys. **62**, 1502.

state label	vibrational quantum number	isotopologue
0	0	$^{16}\text{O}^1\text{H}$
1	1	$^{16}\text{O}^1\text{H}$
2	2	$^{16}\text{O}^1\text{H}$
10	0	$^{17}\text{O}^1\text{H}$
11	1	$^{17}\text{O}^1\text{H}$
12	2	$^{17}\text{O}^1\text{H}$
20	0	$^{18}\text{O}^1\text{H}$
21	1	$^{18}\text{O}^1\text{H}$
22	2	$^{18}\text{O}^1\text{H}$
30	0	$^{16}\text{O}^2\text{H}$
31	1	$^{16}\text{O}^2\text{H}$
32	2	$^{16}\text{O}^2\text{H}$
40	0	$^{17}\text{O}^2\text{H}$
41	1	$^{17}\text{O}^2\text{H}$
42	2	$^{17}\text{O}^2\text{H}$
50	0	$^{18}\text{O}^2\text{H}$
51	1	$^{18}\text{O}^2\text{H}$
52	2	$^{18}\text{O}^2\text{H}$