

Species Tag:	76010	Name:	C5O
Version:	1		Pentacarbon monoxide
Date:	May 1996		X $^1\Sigma^+$
Contributor:	H. S. P. Müller		

Lines Listed:	99	Q(300.0)=	4574.6813
Freq. (GHz) <	271	Q(225.0)=	3430.8963
Max. J:	99	Q(150.0)=	2287.2410
LOGSTR0=	-8.0	Q(75.00)=	1143.7201
LOGSTR1=	-3.0	Q(37.50)=	572.0100
Isotope Corr.:		Q(18.75)=	286.1677
Egy. (cm^{-1}) >	0.0	Q(9.375)=	143.2498
μ_a =	4.057	A=	
μ_b =		B=	1366.8471
μ_c =		C=	

The data were taken from T. Ogata, Y. Ohshima, and Y. Endo, 1995, J. Am. Chem. Soc. **117** 3593.

The dipole moment is from an *ab initio* calculation: P. Botschwina, J. Flügge, and P. Sebald, 1995, J. Phys. Chem. **99** 9755. N. Moazzen-Ahmadi and F. Zerbetto, 1995, J. Chem. Phys. **103**, 6343, obtained 3.376. The former calculation is expected to be more reliable.

The partition function has been calculated up to $J = 250$ because of the low rotational constant.