

Species Tag:	30003	Name:	DCO+
Version:	3		Formyl cation /
Date:	Mar. 2007		Oxomethylium,
Contributor:	B. J. Drouin		gs, v1,v2,v3
			Deuterium isotope
Lines Listed:	1041	Q(300.0)=	541.4248
Freq. (GHz) <	3561	Q(225.0)=	395.5155
Max. J:	40	Q(150.0)=	261.5694
LOGSTR0=	-10.0	Q(75.00)=	131.1793
LOGSTR1=	-8.0	Q(37.50)=	66.0922
Isotope Corr.:	-3.824	Q(18.75)=	33.5591
Egy. (cm ⁻¹) >	0.0	Q(9.375)=	17.3082
μ_a =	3.888	A=	
μ_b =		B=	36019.76
μ_c =		C=	

The observed lines are from: R. C. Woods, R. J. Saykally, T. A. Dixon, P. G. Szanto, and T. Anderson, 1976, 31st Symposium on Molecular Spectroscopy, Columbus, Ohio. M. Bogey, C. Demuyneck, and J. L. Destombes, 1981, Mol. Phys. **43**, 1043. K. V. L. N. Sastry, E. Herbst, and F. C. De Lucia, 1981, J. Chem. Phys. **75**, 4169, P. Caselli, and L. Dore, 2005, Astron. & Astroph. **433** 1145 and V. Lattanzi, A. Walters, B. J. Drouin and J.C. Pearson, 2007, Astroph. J. **662**. Infrared data from K. Kawaguchi, A.R.W. McKellar, E. Hirota, 1986, J. Chem. Phys. **84**, 1146, S.C. Foster and A.R.W McKellar. 1984, J. Chem. Phys. 81(8) 3424, was included in the analysis but not in the compilation. The deuterium hyperfine is based on the measurements of J. Schmid-Burgk, D. Muders, H.S.P. Mueller, B. Brupbacher-Gatehouse 2004, Astron. & Astroph. **419**, 949. The dipole moment was assumed to be the same as for the parent species.