

Species Tag:	36001	Name:	HCl
Version:	3		Hydrochloric acid
Date:	May 2012		
Contributor:	B.J. Drouin		

Lines Listed:	137	Q(300.0)=	81.397
Freq. (GHz) <	9760	Q(225.0)=	61.358
Max. J:	18	Q(150.0)=	41.345
LOGSTR0=	-8.2	Q(75.00)=	21.371
LOGSTR1=	-11.3	Q(37.50)=	11.437
Isotope Corr.:	-0.122	Q(18.75)=	6.583
Egy. (cm ⁻¹) >	0.0	Q(9.375)=	4.488
μ_a =	1.109	A=	
μ_b =		B=	312989.3
μ_c =		C=	

The experimental measurements were reported by I. G. Nolt *et al.*, 1987, J. Mol. Spect. **125**, 274. The dipole moment was measured by F. H. De Leeuw and A. Dymanus, 1971, 26th Symposium on Molecular Spectroscopy, Columbus, Ohio.

Version 3 of this catalog entry corrects a constant offset of 2 in the partition function. The tabulated values also include vibrational partitioning, as reported in Fischer et al. JQSRT 82(1-4) 401-412, 2003. Additional values include Q(500 K) = 134.9761; Q(800 K) = 216.7794; and Q(1000 K) = 273.9018.