

Species Tag:	45013	Name:	PN
Version:	1		$nu=0,1,2,3,4$
Date:	Dec. 1996		$^1\Sigma^+$
Contributor:	J. C. Pearson		

Lines Listed:	1637	Q(300.0)=	801.1685
Freq. (GHz) <	3290	Q(225.0)=	600.0817
Max. J:	70	Q(150.0)=	400.2305
LOGSTR0=	-14.0	Q(75.00)=	200.5798
LOGSTR1=	-14.0	Q(37.50)=	100.7852
Isotope Corr.:	0.0	Q(18.75)=	50.8994
Egy. (cm^{-1}) >	0.0	Q(9.375)=	25.9677
$\mu_a =$	2.7471	A=	
$\mu_b =$		B=	23578.2
$\mu_c =$		C=	

The data were taken from: J. Hoefft, E. Tiemann and Törring, 1972, Z. Naturforsch. **27a**, 703. F. C. Wyse, E. L. Manson and W. Gordy, 1972, J. Chem. Phys. **57**, 1106. I. K. Ahmad and P. A. Hamilton, 1995, J. Mol. Spectrosc. **169**, 286.

The value of the nitrogen nuclear quadrupole (eqQ_N) and the nitrogen magnetic interaction (C_N) were fixed to the molecular beam electric resonance value of J. Raymonda and W. Klemperer, 1971, J. Chem. Phys. **55**, 232. The phosphorus magnetic interaction (C_P) of -78.2 kHz was not included in the analysis. The vibrational energies for $nu_i 1$ were fixed to the values given by Ahmad and Hamilton.

A dipole moment of $2.7514-0.0086(nu+1/2)$ Debye was determined by Raymonda and Klemperer and corrected by Wyse, Manson and Gordy.

PN was first observed in the interstellar medium by L. M. Ziurys, 1987, Astrophys. J. **321**, L81.