Species Tag:	64001	Name:	S2
Version:	2		Diatomic sulfur
Date:	Oct. 1989		
Contributor:	H. M. Pickett		

Lines Listed:	174	Q(300.0)=	989.464
Freq. (GHz) <	2823	Q(225.0)=	725.604
Max. J:	71	Q(150.0)=	462.488
LOGSTR0=	-8.4	Q(75.00)=	203.751
LOGSTR1=	-9.3	Q(37.50)=	82.130
Isotope Corr.:	-0.044	Q(18.75)=	30.733
Egy. (cm^{-1}) >	0.0	Q(9.375)=	12.437
$\mu_a =$		A=	
$\mu_b =$		B=	8831.2
$\mu_c =$		C=	

The experimentally measured lines are given in H. M. Pickett and T. L. Boyd, 1979, J. Mol. Spect. **75**, 53. Additional combination differences were taken from E. H. Fink, H. Kruse, and D. A. Ramsay, 1986, J. Mol. Spect. **119**, 377. The intensities of the magnetic dipole allowed transitions were calculated using the g values given in Pickett and Boyd. Hund's case (b) nomenclature is used even though the states are closer to Hund's case (a) for low J. The J = N + 1 states correlate with $\Sigma = 0$, and the J = N − 1 and J = N states correlate with $\Sigma = \pm 1$ states of p = $\pm (-1)^J$ inversion parity, respectively. The value of Q is determined from a sum over states to J = 80.