



Sulfur hexafluoride

ID: 30

Line lists details:

The line list is part of HITRAN2020 (I.E. Gordon, et al. (2021), *JQSRT*, submitted).

Details	
Isotopologues:	³² S ¹⁹ F ₆
Total number of lines:	336 027
Wavenumber range:	319.582 – 964.196 cm ⁻¹
Intensity range:	9.502×10 ⁻²⁹ – 1.459×10 ⁻²⁰ cm/molecule
First included in HITRAN:	HITRAN editions of 1991 and 1992 [LINK]
Following updates:	HITRAN1996 [LINK] ; HITRAN2004 [LINK] ; HITRAN2008 [LINK] ; HITRAN2020

Reference codes:

Parameter	Reference number	Source
ν	1	C.P. Rinsland, L.R. Brown, C.B. Farmer (1990), <i>J. Geophys. Res.</i> 95 , 5577-5585 [LINK] ; B. Bobin, et al. (1987), <i>J. Mol. Spectrosc.</i> 121 , 91-127 [LINK] ; B. Bobin, private communication (1990).
	2	C.P. Rinsland, NASA Langley Research Center, private communication (1990).
	3	O. Acef, et al. (2000), <i>J. Mol. Spectrosc.</i> 199 , 188-204 [LINK] ; V. Boudon, G. Pierre (2002), <i>Transworld Research Network, Trivandrum, India (Editor: S.G. Pandalai)</i> 1 , 25-55.
	4	Calculations performed by V. Boudon (2008) with HTDS software using data from: V. Boudon, G. Pierre (2002), <i>Transworld Research Network, Trivandrum, India (Editor: S.G. Pandalai)</i> 1 , 25-55.

	5	Calculations performed by V. Boudon (2008) with HTDS software using data from: V. Boudon, G. Pierre, H. Bürger (2001), <i>J. Mol. Spectrosc.</i> 205 , 304-311 [LINK]
	6	H. Ke, et al. (2020), <i>J. Mol. Spectrosc.</i> 368 , 111251 [LINK]
S	1	C.P. Rinsland, L.R. Brown, C.B. Farmer (1990), <i>J. Geophys. Res.</i> 95 , 5577-5585 [LINK] ; K. Fox (1976), <i>Opt. Comm.</i> 19 , 397-400 [LINK] ; B. Bobin, private communication (1990).
	2	O. Acef, et al. (2000), <i>J. Mol. Spectrosc.</i> 199 , 188-204 [LINK] ; V. Boudon, G. Pierre (2002), <i>Transworld Research Network, Trivandrum, India (Editor: S.G. Pandalai)</i> 1 , 25-55.
	3	Calculations performed by V. Boudon (2008) with HTDS software using data from: K.C. Kim, et al. (1979), <i>J. Mol. Spectrosc.</i> 76 , 322-340 [LINK] ; W.B. Person, B.J. Krohn (1983), <i>J. Mol. Spectrosc.</i> 98 , 229-257 [LINK]
	4	H. Ke, et al. (2020), <i>J. Mol. Spectrosc.</i> 368 , 111251 [LINK]
γ_{air}	1	C.P. Rinsland, L.R. Brown, C.B. Farmer (1990), <i>J. Geophys. Res.</i> 95 , 5577-5585 [LINK] ; G.D.T. Tejwani, K. Fox (1987), <i>JQSRT</i> 37 , 541-546 [LINK]
γ_{self}	1	G.D.T. Tejwani, K. Fox (1987), <i>JQSRT</i> 37 , 541-546 [LINK]
n_{air}	1	G.D.T. Tejwani, K. Fox (1987), <i>JQSRT</i> 37 , 541-546 [LINK]
δ_{air}	0	N/A