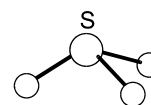


Structure Data of Free Polyatomic Molecules

270 MW	H_3S^+		Sulfonium		C_{3v} H_3S^+	
	r_0		\AA		θ_0 deg	
		SH_3^+		SD_3^+		SH_3^+ SD_3^+
	S–H	1.3578717(57)		1.355690(45)	H–S–H	94.17252(108) 94.187(5) ^{a)}
	r_z		\AA		θ_z deg	
		SH_3^+		SD_3^+		SH_3^+ SD_3^+
	S–H	1.36512(22)		1.36086(16)	H–S–H	94.098(26) 94.1211(195)
	$r_e^{\text{b)}}$	\AA				
	S–H	1.35001(113)				
	Atom	$z_s [\text{\AA}]$	$y_s [\text{\AA}]$			
	S	0.114840	0.0			
	H	–0.6077	1.1441			



^{a)} Uncertainty was not estimated in the original paper.

^{b)} Estimated from the r_z structures of SH_3^+ and SD_3^+ .

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