

Structure Data of Free Polyatomic Molecules

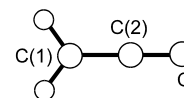
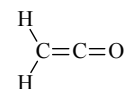
 224
MW

 $\text{C}_2\text{H}_2\text{O}$
Ketene
Ethenone

 C_{2v}

r_s	\AA	θ_s	deg
C=O	1.1615(131)	H-C-H	122.11(121)
C=C	1.3142(259)		
C-H	1.0793(64)		

Atom	$ a_s [\text{\AA}]$	$b_s [\text{\AA}]$
O	1.182805	0.0
C(2)	0.0209	0.0
C(1)	1.292938	0.0
H	1.816181	± 0.944260



The rotational spectrum of $\text{H}_2\text{CC}^{17}\text{O}$ was observed for the first time.

Guarnieri, A., Huckauf, A.: Z. Naturforsch. A **56** (2001) 440.

[II/25B\(3, 624\)](#)