

1644  
MW

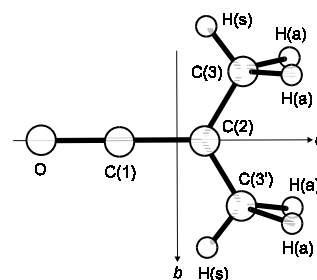
**C<sub>4</sub>H<sub>6</sub>O**

**Dimethylketene**

**C<sub>2v</sub>**  
**O=C=C(CH<sub>3</sub>)<sub>2</sub>**

$r_s$	Å <sup>a)</sup>	$\theta_s$	deg <sup>a)</sup>
C(3)–H(s)	1.088(10)	C(2)–C(3)–H(s)	111.9(10)
C(3)–H(a)	1.093(5)	C(2)–C(3)–H(a)	110.5(5)
C(2)–C(3)	1.505(10)	$\alpha^a$	59.9(5)
C(1)=C(2)	1.314(15)		
C=O	1.171 <sup>b)</sup>		

Atom	$a_s$ [Å]	$b_s$ [Å]	$c_s$ [Å]
C(3)	1.2084	±1.3039	0.0
H(s)	0.540	±2.1625	0.0
H(a)	1.8532	±1.3714	±0.8804



The C–H(s) bonds are eclipsed with respect to the C(1)=C(2) bond.

<sup>a)</sup> Half the angle C(3)–C(2)–C(3').

<sup>b)</sup> Assumed.

Nair, K.P.R., Rudolph, H.D., Dreizler, H.: J. Mol. Spectrosc. **48** (1973) 571.