

1717
MW

C₄H₈

Cyclobutane

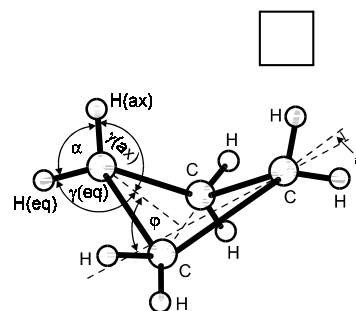
D_{2d}

r_0	Å ^{a)}	θ_0	deg ^{a)}
C–C	1.5549(5)	φ	28.32(23)
C–H (ax)	1.0934(19)	γ (ax)	119.93(14)
C–H (eq)	1.0910(9)	γ (eq)	130.74(11)

The microwave spectra of cyclobutane-*d*₁, and -1,1-*d*₂, were measured.

Caminati, W., Vogelsanger, B., Meyer, R., Grassi, G.,
Bauder, A.: J. Mol. Spectrosc. **131** (1988) 172.

See also: Vogelsanger, B., Caminati, W., Bauder, A.: Chem. Phys. Lett. **141** (1987) 245.



ED, IR

r_z	Å ^{a)}	θ_z	deg ^{a)}
C–C	1.552(1)	φ ^{b)}	27.9(16)
C–H	1.093(3)	α ^{b)}	106.4(13)
		β ^{b)}	6.2(12)

r_g	Å ^{a)}
C–C	1.554(1)
C–H	1.109(3)

The measurements were made at room temperature.

^{a)} Estimated limits of error.

^{b)} See figure for the definition.

Egawa, T., Fukuyama, T., Yamamoto, S., Takabayashi, F., Kambara, H., Ueda, T.,
Kuchitsu, K.: J. Chem. Phys. **86** (1987) 6018.