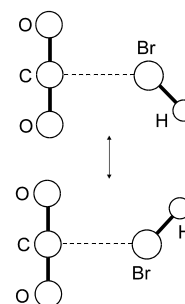


66  
MW**CHBrO<sub>2</sub>****Carbon dioxide – hydrogen bromide (1/1)**  
(weakly bound complex)**C<sub>2v</sub>**  
(effective symmetry class)  
(large-amplitude motion)  
CO<sub>2</sub> · HBr

Isotopic species	$\theta_0(\text{C}\cdots\text{Br}\cdots\text{H})$ [deg]	$\theta_0(\alpha)$ [deg] <sup>a)</sup>
CO <sub>2</sub> · H <sup>79</sup> Br	103.17(16)	24.40(17)
CO <sub>2</sub> · D <sup>79</sup> Br	106.8617(76)	19.7235(90)

There are two equivalent minima, and the tunneling splittings associated with these two minima are approximately 1200 and 80 MHz for CO<sub>2</sub> · HBr and CO<sub>2</sub> · DBr, respectively.

<sup>a)</sup> Zero-point bending amplitude of HBr.



Rice, J.K., Lovas, F.J., Fraser, G.T., Suenram, R.D.: J. Chem. Phys. **103** (1995) 3877.

Replaces [II/25B\(3, 137\)](#), MW