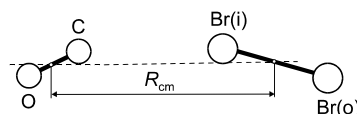


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MW**CBr₂O****Carbon monoxide – dibromine (1/1)**
(weakly bound complex)**C_{∞v}**
(effective symmetry class)
(large-amplitude motion)CO · Br₂

Isotopic species	$r_0(R_{\text{cm}})$ [Å] ^{a)}	$r_0[\text{C}\cdots\text{Br}(\text{i})]$ [Å] ^{a) b)}
O ¹² C · ⁷⁹ Br ⁷⁹ Br	4.8937(20)	3.1057(30)
O ¹² C · ⁸¹ Br ⁷⁹ Br	4.8792(20)	3.1057(30)
O ¹² C · ⁸¹ Br ⁸¹ Br	4.8935(20)	3.1058(30)
O ¹² C · ⁷⁹ Br ⁸¹ Br	4.9078(20)	3.1057(30)
O ¹³ C · ⁷⁹ Br ⁷⁹ Br	4.8707(20)	3.1053(30)
O ¹³ C · ⁸¹ Br ⁷⁹ Br	4.8564(20)	3.1053(30)

Atom	a_0 [Å]
O	−4.6712
C	−3.5050
Br(i)	−0.3983
Br(o)	1.8780



The complex is linear, with the weak bond between the C atom of CO and Br(i). The intermolecular stretching force constant is 5.0 N m^{−1}.

^{a)} Uncertainties were not estimated in the original paper.

^{b)} The bromine atom that is closer to CO. See figure for the definition.

Waclawik, E.R., Thumwood, J.M.A., Lister, D.G., Fowler, P.W., Legon, A.C.: Mol. Phys. **97** (1999) 159.