

Structure Data of Free Polyatomic Molecules

93	BrH_2^-	Dihydrogen-d_2 – bromide (1/1)	$\text{C}_{\infty v}$
IR		(weakly bound complex)	(effective symmetry class) (large-amplitude motion) $\text{D}_2 \cdot \text{Br}^-$
	<u>Species</u>	<u>State</u>	<u>$R_{\text{cm}} [\text{\AA}]$ ^{a)}</u>
	$\text{Br}^- \cdot \text{paraD}_2$	$v=0$	3.414(4)
		$v=1$	3.339(4)
	$\text{Br}^- \cdot \text{orthoD}_2$	$v=0$	3.413(1)
		$v=1$	3.337(1)

The structure was determined from the rotationally resolved IR spectrum of the D–D stretch fundamental.

^{a)} Uncertainties were unidentified, possibly estimated standard errors.

Wild, D.A., Weiser, P.S., Bieske, E.J.: J. Chem. Phys. **115** (2001) 6394.