

Structure Data of Free Polyatomic Molecules

79	BeCl₂	Beryllium dichloride	D_{∞h}
ED		Beryllium(II) chloride	BeCl ₂

$$\frac{r_g}{\text{Be-Cl}} \quad \text{\AA}^{\text{a)}} \\ 1.798(4)$$

$$\frac{r_e^{\text{b)}}}{\text{Be-Cl}} \quad \text{\AA}^{\text{a)}} \\ 1.791(5)$$

According to the data of simultaneous ED and mass spectrometric experiments, the molecule exists as a mixture of monomeric (97.5 mol%) and dimeric forms.
The nozzle temperature was 547 K.

^{a)} 2.5 times the estimated standard error including a systematic error.

^{b)} Anharmonic correction (via diagonal cubic force constants) was determined by fitting to the experimental intensity curves. Nonlinear kinematic effect was also taken into account.

Girichev, A.G., Giricheva, N.I., Vogt, N., Girichev, G.V., Vogt, J.: J. Mol. Struct. **384** (1996) 175.