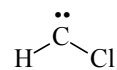


<b>68</b>	<b>CHCl</b>	<b>Chloromethylene</b>	<b>C<sub>s</sub></b>
UV			
	State	$\tilde{X}^2A'$	
	Energy [eV]	0.00	
	$r_m(\text{C-H})$ [Å]	1.1002(11)	
	$r_m(\text{C-Cl})$ [Å]	1.69254(21)	
	$\theta_m(\text{H-C-Cl})$ [deg]	102.669(70)	



DCCl radicals were generated by the laser-photolysis of DCBr<sub>2</sub>Cl. Near-infrared absorption spectra were obtained using frequency-modulated laser absorption spectroscopy of jet-cooled and ambient temperature samples. Rotational analysis gave improved ground state rotational constants for DC<sup>35</sup>Cl and DC<sup>37</sup>Cl. When combined with existing data for HCCl using Watson's  $r_m^{(1)}$  model, an improved geometry for the ground state was obtained.

Lin, A., Kobayashi, K., Yu, H-G., Hall, G.E., Muckerman, J.T., Sears, T.J., Merer, A.J.:  
J. Mol. Spectrosc. **214** (2002) 216.

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