

237 IR	$\text{H}_2\text{HeN}^+$	<b>Aminylium – helium (1/1)</b> (weakly bound complex)	<b><math>\text{C}_{\infty v}</math></b> (effective symmetry class) (large-amplitude motion) $\text{NH}_2^+ \cdot \text{He}$						
	<table> <tr> <th><math>r_0</math></th> <th><math>\text{\AA}^{\text{a})}</math></th> </tr> <tr> <td><math>R_{\text{cm}}</math></td> <td>2.922(3)</td> </tr> <tr> <td>H...He</td> <td>1.897(3)</td> </tr> </table>	$r_0$	$\text{\AA}^{\text{a})}$	$R_{\text{cm}}$	2.922(3)	H...He	1.897(3)		
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H...He	1.897(3)								

The structure was determined from the rotationally resolved IR photodissociation spectrum of the asymmetric N–H stretch vibration ( $\nu_3$ ). The complex has a quasilinear H-bound geometry in its  $^3\Sigma_g^-$  electronic ground state. The geometry of the aminylium subunit was assumed to be unchanged upon complexation.

<sup>a</sup>) Uncertainties were unidentified.

Dopfer, O., Roth, D., Maier, J.P.: Chem. Phys. Lett. 310 (1999) 201.