

226	HN_4^+	Hydrogen (1+) ion – dinitrogen (1/2)	$\text{D}_{\infty\text{h}}$
IR, <i>ab initio</i> calculations (CCSD(T)/cc-pV5Z)		(weakly bound complex)	(effective symmetry class) (large-amplitude motion) $\text{N}\equiv\text{N} \cdot \text{H}^+ \cdot \text{N}\equiv\text{N}$

r_e	\AA
$\text{N}\equiv\text{N}$	1.0949(2) ^{a)}
$\text{N}\dots\text{H}$	1.277(5) ^{b)}

The structure was determined from the rotationally resolved ν_3 antisymmetric $\text{N}\equiv\text{N}$ stretching vibration. The complex has a linear centrosymmetric equilibrium structure.

^{a)} Uncertainty was unidentified, possibly estimated standard error.

^{b)} Uncertainty was not given in the original paper.

Verdes, D., Linnartz, H., Maier, J.P., Botschwina, P., Oswald, R., Rosmus, P., Knowles, P.J.:
J. Chem. Phys. **111** (1999) 8400.