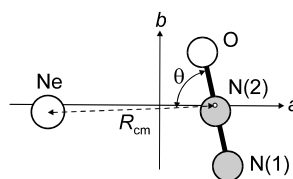


r_0	$\text{\AA}^a)$	θ_0	$\text{deg}^a)$
R_{cm}	3.225(5)	$\theta^b)$	81.70(30)
O...Ne	3.258(5)	O=N(2)...Ne	80.39(30)
N(1)...Ne	3.601(5)	N(1)=N(2)...Ne	99.60(30)
N(2)...Ne	3.237(5)		
r_z	$\text{\AA}^a)$	θ_z	$\text{deg}^a)$
R_{cm}	3.249(5)	$\theta^b)$	84.06(30)
O...Ne	3.325(5)	O=N(2)...Ne	82.76(30)
N(1)...Ne	3.579(5)	N(1)=N(2)...Ne	97.24(30)
N(2)...Ne	3.258(5)		
r_s	$\text{\AA}^a)$	θ_s	$\text{deg}^a)$
O...Ne	3.289(5)	O=N(2)...Ne	86.18(30)
N(1)...Ne	3.438(5)	N(1)=N(2)...Ne	93.82(30)
N(2)...Ne	3.177(5)		

The spectra are those of prolate asymmetric rotors and are in accord with a T-shaped structure of the complex. The structural parameters indicate that the Ne atom is on average closer to the O atom than to the terminal N atom. The intermolecular stretching and bending force constants are 0.89 N m^{-1} and $1.07 \times 10^{-20} \text{ N m}$, respectively.

^b) See figure for the definition (angle between R_{cm} and the N_2O molecular axis).



Ngari, M.S., Jäger, W.: J. Mol. Spectrosc. **192** (1998) 320.

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Isotopic species	ν	R_{cm} [Å] ^a	θ [deg] ^a
NNO · ²⁰ Ne	0	3.2414(5)	82.00(4)
	1	3.2460(7)	81.91(4)
NNO · ²² Ne	0	3.2400(12)	82.05(13)
	1	3.2428(20)	82.00(10)

The structure was determined from the rovibrational spectrum in the ν_3 N_2O stretching region. The geometries of the monomer subunits were assumed to be unchanged upon complexation.

^{a)} Uncertainties were unidentified.

Herrebout, W.A., Qian, H.-B., Yamaguchi, H., Howard, B.J.: J. Mol. Spectrosc. **189** (1998) 235.