

60
MW**CHAr₃N****Hydrogen cyanide – argon (1/3)**
(weakly bound complex)**C_{3v}**
(effective symmetry class)
(large-amplitude motion)

H–C≡N · 3Ar

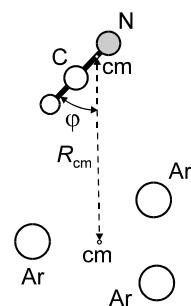
r_0	Å ^{a)}	θ_0	deg ^{a)}
$r^b)$	2.29(2)	$\varphi^c)$	45.3(5)

A pseudodiatom analysis of the rotational constants gives the cm (center of mass) of 3Ar to cm of HCN distance to be 3.47(2) Å. The potential minimum of the complex is tricuspid, with large gullies, and shallow (507 cm⁻¹).

^{a)} Uncertainties were not estimated in the original paper.

^{b)} Distance between the cm of 3Ar and H.

^{c)} See figure for the definition.



Gutowsky, H.S., Arunan, E., Emilsson, T., Tschopp, S.L., Dykstra, C.E.: J. Chem. Phys. **103** (1995) 3917.