

1425
MW

$\text{C}_3\text{H}_{10}\text{ClN}$

Trimethylamine – hydrogen chloride (1/1)
(weakly bound complex)

C_{3v}
(effective symmetry class)
 $(\text{CH}_3)_3\text{N} \cdot \text{HCl}$

Isotopic species	$r_0(R_{\text{cm}})^a$ [Å]	$r_0(\text{N} \dots \text{Cl})$ [Å]	k_σ [N m ⁻¹]	ν_σ [cm ⁻¹]
$(\text{CH}_3)_3^{14}\text{N} \cdot \text{H}^{35}\text{Cl}$	3.1403(17)	2.8164(3)	84	253
$(\text{CH}_3)_3^{14}\text{N} \cdot \text{D}^{35}\text{Cl}$	3.0935(15)	2.8035(5)	87	255
$(\text{CH}_3)_3^{15}\text{N} \cdot \text{H}^{35}\text{Cl}$	3.1344(16)	2.8166(3)	81	248
$(\text{CH}_3)_3^{15}\text{N} \cdot \text{H}^{37}\text{Cl}$	3.1363(17)	2.8166(3)	80	245

^a) $\alpha = \beta = 10(2)^\circ$ assumed.

Legon, A.C., Rego, C.A.: J. Chem. Phys.
90 (1989) 6867.

