

The Crystal Structures of Chlorodimethyl(dimethylamino)silane and Dimethyl-bis-(dimethylamino)silane

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Single crystals of chlorodimethyl(dimethylamino)silane, $\text{Me}_2\text{NSiMe}_2\text{Cl}$, and dimethyl-bis-(dimethylamino)silane, $(\text{Me}_2\text{N})_2\text{SiMe}_2$, have been grown *in situ* from the melt at low temperatures and their structures determined by X-ray diffraction. Important structural parameters ($\text{Å}/^\circ$): $\text{Me}_2\text{NSiMe}_2\text{Cl}$ ($C2/m$) Si-N 1.686(2), Si-C 1.851(1), Si-Cl 2.109(1), N-Si-Cl 111.7(1), C-Si-Cl 105.1(1), C-N-C 112.8(2), Si-N-C 123.4(1); $(\text{Me}_2\text{N})_2\text{SiMe}_2$ ($P2_1/c$) Si-N(1) 1.725(1), Si-C(1) 1.868(1), N(1)-Si-N(2) 105.7(1), C(3)-N(1)-C(4) 111.6(1), Si-N(1)-C(3) 122.4(1), Si-N(1)-C(4) 120.0(1).

Key words: Silicon, Crystal Structure, Hypercoordination