

Preparation and X-Ray Structure of 4-*N,N'*-Bis(trimethylsilyl)-amino-3,5-diisopropylphenylselenium Trichloride

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Crystal Structure, 2,6-Diisopropylaniline, Aryl Selenium Trichloride, Bridging Chloride, NMR Data

The reaction of SeCl_4 or SeCl_2 with *N,N'*-bis(trimethylsilyl)-2,6-diisopropylaniline occurs not at the nitrogen atom but by electrophilic aromatic substitution at C-4 of the phenyl ring to give $[(\text{CH}_3)_3\text{Si}]_2\text{NC}_6\text{H}_2(i\text{Pr}_2)\text{SeCl}_3$, which crystallizes as the chloro-bridged dimer in the triclinic system, space group $\text{P}\bar{1}$, $a = 10.2598(17)$, $b = 13.665(3)$, $c = 9.7838(10)$ Å, $\alpha = 90.056(13)$, $\beta = 102.439(11)$, $\gamma = 70.922(14)^\circ$, $V = 1262.3(4)$ Å³, $Z = 1$. The dimer contains an essentially planar $\text{Cl}_2\text{Se}(\mu\text{-Cl})_2\text{SeCl}_2$ unit, with *trans* apical $(\text{Me}_3\text{Si})_2\text{NC}_6\text{H}_2(i\text{Pr})_2$ groups, resulting in approximately square pyramidal geometry at Se. The bridging Se-Cl distances are unequal at 2.587(2) and 2.749(2) Å.