Pyridine-promoted Cyclization of Functionalized N-Silylated Boron-Nitrogen Compounds

Fanny Schurz and Martin Jansen

Max Planck Institute for Solid State Research, Heisenbergstraße 1, 70569 Stuttgart, Germany

Reprint requests to Prof. Dr. Dr. h. c. M. Jansen. Fax: +49(0)711689-1502.
E-mail: m.jansen@fkf.mpg.de

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Dichloroboryldisilylamines $[SiCl_m(CH_3)_{3-m}]N[Si(CH_3)_3](BCl_2)$ (m = 1 – 3) as well as chloromethylboryl-bis-(chlorodimethylsilyl)amine $[SiCl(CH_3)_2]_2N[BCl(CH_3)]$ form 1 : 1 adducts with pyridine (**1** – **4**). Those with m = 2 and 3 have been converted into functionalized diazadiboretidine derivatives which are still coordinated by pyridine: $[(SiCl_m(CH_3)_{3-m})NBCl \cdot Py]_2$ (**5**: m = 2, **6**: m = 3). Single-crystal X-ray diffraction structure analyses confirm the presence of planar, rhombus-shaped, four-membered boron-nitrogen rings with tetra-coordinated boron atoms and nitrogen-bonded, chlorine-functionalized silyl groups, for both compounds.

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