

# N,N'-Bis(trimethylsilyl)benzamidinato-Komplexe von Vanadium(V), Niob(V) und Tantal(V)

N,N'-Bis(trimethylsilyl)benzamidinato Complexes of Vanadium(V), Niobium(V) and Tantalum(V)

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N,N'-Bis(trimethylsilyl)benzamidinato, Silylated *tert*-Butylamido Complexes of Vanadium(V), Niobium(V), Tantalum(V), NMR Data

N,N'-Bis(trimethylsilyl)benzamidinato complexes of vanadium(V), niobium(V) and tantalum(V) have been prepared starting from  ${}^t\text{BuN}=\text{MCl}_3 \cdot n \text{ py}$  and  ${}^t\text{BuN}=\text{MCpCl}_2$ , respectively:  ${}^t\text{BuN}=\text{V}[\text{PhC}(\text{NSiMe}_3)_2]_n \text{Cl}_{3-n}$  ( $n = 1, 2$ );  ${}^t\text{BuN}=\text{M}[\text{RC}(\text{NSiMe}_3)_2]\text{Cl}_2 \cdot \text{py}$  [ $\text{M} = \text{Nb, Ta}$ ;  $\text{R} = \text{C}_6\text{H}_5, \text{C}_6\text{H}_4(4\text{-CF}_3)$ ];  ${}^t\text{BuN}=\text{MCp}[\text{RC}(\text{NSiMe}_3)_2]\text{Cl}$  [ $\text{M} = \text{V, Nb, Ta}$ ;  $\text{R} = \text{C}_6\text{H}_5, \text{C}_6\text{H}_4(4\text{-CF}_3)$ ];  ${}^t\text{BuN}=\text{VCp}[\text{PhC}(\text{NSiMe}_3)_2](\text{O}^t\text{Bu})$ . The syntheses of silylated *tert*-butylamido complexes  ${}^t\text{BuN}=\text{M}[\text{N}^t\text{Bu-SiMe}_2\text{-NH}^t\text{Bu}]\text{Cl}_2 \cdot \text{py}$  ( $\text{M} = \text{Nb, Ta}$ ),  ${}^t\text{BuN}=\text{V}[\text{N}^t\text{Bu-SiMe}_2\text{-O}^t\text{Bu}]\text{Cl}_2$  and  ${}^t\text{BuN}=\text{M}[\text{N}^t\text{Bu-SiMe}_2\text{-O}^t\text{Bu}]\text{Cl}_2 \cdot \text{py}$  [ $\text{M} = \text{Nb, Ta}$  (**20**)] are also described. The compounds have been investigated by  ${}^1\text{H}$  NMR data,  ${}^{51}\text{V}$  NMR data, mass spectra, X-ray data diffraction analysis.