Synthesis and Structure of \textit{trans}\textendash\textit{Dichloro-tetra(pyrazole)}\textit{gallium(III)} Chloride and Tetrachlorogallate(III)

Stefan Nogai, Annette Schier, and Hubert Schmidbaur

Anorganisch-chemisches Institut, Technische Universität München, Lichtenbergstrasse 4, D-85747 Garching, Germany

Reprint requests to Prof. Dr. H. Schmidbaur. E-mail: H.Schmidbaur@lrz.tum.de

Z. Naturforsch. \textbf{57 b}, 183–186 (2002); received November 15, 2001

Gallium Complexes, Pyrazole Complexes, Bioinorganic Chemistry

$[\text{GaCl}_2(\text{pyrazole})_4]^+\text{Cl}^-$ and $[\text{GaCl}_2(\text{pyrazole})_4]^+\text{GaCl}_4^-$ are formed in the reaction of pyrazole and anhydrous gallium trichloride in toluene/diethyl ether. The crystal structure of the chloride salt shows cations in a \textit{trans}-conformation which are associated with the chloride counterions through N-H$\cdots$Cl hydrogen bonds.