Preparation of a Copper(I) Halide Coordination Polymer by Thermal Decomposition of a Precursor with Predefined Stoichiometry

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The ligand-rich precursor compound tetra-μ-chloro-bis (μ_2-2,3-dimethylpyrazine)-tetrakis-(acetonitrile-N)tetra-copper(I) (**1**) was prepared by the reaction of CuCl with 2,3-dimethylpyrazine in acetonitrile. On heating this compound decomposes quantitatively in a single step directly to the ligand-deficient coordination polymer di-μ_3-chloro-(μ_2-2,3-dimethylpyrazine-N,N$'$)copper(I).

Key words: Copper(I) Halide Coordination Polymers, Crystal Structures, Thermal Decomposition