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 (µ₂-2,3-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-µ₃-chloro-(µ₂-2,3-dimethylpyrazine-N,N')copper(I).

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