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Pyrazole and its derivatives have been widely used as bridging ligands in molecular magnetism and supramolecular chemistry for obtaining discrete oligonuclear complexes of high nuclearity and coordination polymers [1-3]. A polymorph of the complex [Cu Prz4Cl2] has been synthesized and characterized by X-rays single crystal diffraction. Its crystallographic study at 170°=K showed that it belongs to the space group P-1. The mononuclear metal complex consists of a Cu ion as the central atom possessing an octahedral environment. The four equatorial positions are occupied by four N atoms belonging to four monodentately coordinated pyrazole molecules. The axial positions are occupied with two chloride ions. In the crystal packing, the complex molecules are connected through intermolecular N-H…Cl hydrogen bond into an infinite linear chain running parallel to the b axis.


Keywords : Pyrazole ligand, Mononuclear copper complex, X-ray diffraction.