Dihydro-1,2,4-triazin-6-one Oxime, Copper(II) Complex, Square Pyramidal Complex

Reaction of \((L)\)-3-acetyl-5-benzyl-1-phenyl-4,5-dihydro-1,2,4-triazin-6-one oxime (1) with copper acetate afforded the complex 5 in high yield. Single crystal X-ray structural analysis of 5 revealed a square-pyramidal geometry around the copper ion where the two oxime ligands are coordinated symmetrically to the Cu atom. The apex of the square-pyramid is occupied by a chloride ligand with the copper atom roofed above the center of the plane of the four coordinating nitrogens by about 0.22 Å. MS-FAB, magnetic and other analytical data are in accord with this solid-state structure.