

Bis(N-sec-butyl-N-n-propyldithiocarbamato- 2S,S')(1,10-phenanthroline- 2N,N')zinc(II)

ABSTRACT

Two independent but very similar molecules comprise the asymmetric unit of the title compound, $[\text{Zn}(\text{C}_8\text{H}_{16}\text{NS}_2)_2(\text{C}_{12}\text{H}_8\text{N}_2)]$. The $\text{N}(2)\text{S}(4)$ donor set about Zn is defined by two symmetrically chelating dithio-carbamate ligands and a 1,10-phenanthroline ligand. Distortions from the ideal octa-hedral coordination geometry arise from the restricted bite angles of the ligands. The main feature of the crystal packing is the formation of tetrameric supra-molecular aggregates mediated by $\text{C-H}\cdots\text{S}$ inter-actions. Disorder was found in each of the sec-butyl groups. This was resolved over two positions in each case with the major components of the disorder having site occupancies in the range 0.551 (6)-0.725 (5).

Keyword: Single-crystal X-ray