

Bis{(Z)-[(E)-2-(pyridin-2-ylmethylidene)hydrazin-1-ylidene][(pyridin-2-yl)methylsulfanyl]methanethiolato}nickel(II)

ABSTRACT

The title compound, [Ni(C₁₃H₁₁N₄S₂)₂], was obtained by the reaction of S-2-picolylidithiocarbazate and pyridine-2-carbaldehyde with nickel(II) acetate. The NiII atom is located on a twofold rotation axis and is bonded to four N atoms at distances of 2.037 (8) and 2.109 (9) Å, and to two S atoms at a distance of 2.406 (3) Å, leading to a distorted octahedral coordination. The angle between the mean planes of the coordinating moieties of the two symmetry-related tridentate ligands is 83.3 (2)°. In the crystal, complex molecules are linked by weak C - H...S hydrogen bonds, π - π interactions between the pyridine rings [centroid-centroid distance = 3.775 (9) Å] and C - H... π interactions. The hydrogen-bonding interactions lead to the formation of layers parallel to (010); π - π interactions link these layers into a three-dimensional network.

Keyword: Single-crystal X-ray study.