

(E)-[({[(3-Methylphenyl)methyl]sulfanyl}-methanethioyl)amino](1-phenylpentylidene)amine.

ABSTRACT

In the structure of the title compound, C₂₀H₂₄N₂S₂, the central CN₂S₂ atoms are planar (r.m.s. deviation = 0.0205 Å) but both benzene rings are twisted out of this plane forming dihedral angles of 23.03 (6) and 84.75 (4)° (tolyl); the n-butyl group occupies a position normal to the plane [N—C—C—C torsion angle = -84.33 (16)°]. The conformation of the imine bond [1.2888 (18) Å] is E. The syn arrangement of the thione S and amino H atoms enables the formation of N—H(...)S hydrogen bonds between centrosymmetrically related molecules. These lead to eight-membered {...)HNC=S}2 synthons which are further stabilized by proximate C—H(...)S interactions. The resulting dimeric aggregates are connected into a supramolecular chain along the c axis by C—H(...)π(tolyl) interactions.

Keyword: Single-crystal X-ray study.