(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.