**N,N’-Bis[1-(thiophen-2-yl)ethylidene]-ethane-1,2-diamine**

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Key indicators: single-crystal X-ray study; mean Ca–C = 0.003 Å; R factor = 0.035; wR factor = 0.090; data-to-parameter ratio = 18.0.

Molecules of the title compound, C_{14}H_{16}N_{2}S_{2}, have a centre of inversion in the middle of the –CH_{2}–CH_{2}– bond; the (C_{4}H_{3}S)(CH_{3})C=N–CH_{2}– moiety is almost planar (r.m.s. deviation for non-H atoms 0.027 Å).

Related literature

For a related transition metal adduct, see: Modder et al. (1995).

### Experimental

**Crystal data**

C_{14}H_{16}N_{2}S_{2}  
M_{r} = 276.41  
Monoclinic, P2_{1}/n  
a = 5.5831 (3) Å  
b = 9.3939 (4) Å  
c = 12.9202 (5) Å  
β = 95.342 (4)

V = 674.68 (5) Å³  
Z = 2  
Mo Kα radiation  
μ = 0.38 mm⁻¹  
T = 100 K  
0.25 × 0.20 × 0.15 mm

**Data collection**

Agilent SuperNova Dual diffractometer with Atlas detector  
Absorption correction: multi-scan (CrysAlis PRO; Agilent, 2010)  
T_{min} = 0.912, T_{max} = 0.946  
3036 measured reflections  
1495 independent reflections  
1244 reflections with I > 2σ(I)

R_{int} = 0.028

**Refinement**

R[F^2 > 2σ(F^2)] = 0.035  
wR(F^2) = 0.090  
S = 1.04  
1495 reflections  
83 parameters  
H-atom parameters constrained  
Δρ_{max} = 0.44 e Å⁻³  
Δρ_{min} = −0.40 e Å⁻³

Data collection: CrysAlis PRO (Agilent, 2010); cell refinement: CrysAlis PRO; data reduction: CrysAlis PRO; program(s) used to solve structure: SHEXL97 (Sheldrick, 2008); program(s) used to refine structure: SHEXL97 (Sheldrick, 2008); molecular graphics: X-SEED (Barbour, 2001); software used to prepare material for publication: publCIF (Westrip, 2010).

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Supplementary data and figures for this paper are available from the IUCr electronic archives (Reference: BT5618).

### References


