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2,3-Dimethyl-*N*-[(*E*)-2,4,5-trimethoxybenzylidene]aniline

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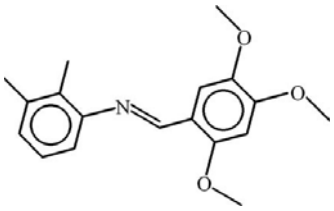
Key indicators: single-crystal X-ray study; T = 296 K; mean σ(C–C) = 0.002 Å; R factor = 0.045; wR factor = 0.139; data-to-parameter ratio = 19.4.

In the title compound, $C_{18}H_{21}NO_3$, the C=N bond has a *trans* conformation and the benzene rings are oriented at a dihedral angle of 61.32 (6)°. The C atoms of the three methoxy groups are all roughly coplanar with their attached ring [deviations = 0.219 (2), −0.097 (2) and −0.137 (2) Å]. In the crystal, a weak C—H···π interaction may help to establish the packing.

Related literature

For background information on Schiff bases and related crystal structures, see: Tahir *et al.* (2010*a*,*b*); Tariq *et al.* (2010).



Experimental

Crystal data

$C_{18}H_{21}NO_3$
M_r = 299.36
Triclinic, $P\overline{1}$
a = 7.0040 (2) Å
b = 11.0396 (4) Å
c = 11.1585 (4) Å
α = 73.941 (1)°
β = 76.022 (2)°
γ = 82.079 (1)°
V = 802.24 (5) Å^3
Z = 2
Mo $K\alpha$ radiation
μ = 0.08 mm^{-1}
T = 296 K
0.32 × 0.14 × 0.12 mm

Data collection

Bruker Kappa APEXII CCD diffractometer
Absorption correction: multi-scan (*SADABS*; Bruker, 2005)
T_{min} = 0.980, T_{max} = 0.985
13855 measured reflections
3957 independent reflections
2935 reflections with $I > 2\sigma(I)$
R_{int} = 0.024

Refinement

$R[F^2 > 2\sigma(F^2)]$ = 0.045
$wR(F^2)$ = 0.139
S = 1.07
3957 reflections
204 parameters
H-atom parameters constrained
$\Delta\rho_{max}$ = 0.23 e Å^{-3}
$\Delta\rho_{min}$ = −0.16 e Å^{-3}

Table 1
Hydrogen-bond geometry (Å, °).

*Cg*1 is the centroid of the C1–C6 ring.

D—H···A	D—H	H···A	D···A	D—H···A
C16—H16*B*···*Cg*1^{i}	0.96	2.99	3.5694 (19)	120

Symmetry code: (i) $-x+2, -y+1, -z+1$.

Data collection: *APEX2* (Bruker, 2009); cell refinement: *SAINT* (Bruker, 2009); data reduction: *SAINT*; program(s) used to solve structure: *SHELXS97* (Sheldrick, 2008); program(s) used to refine structure: *SHELXL97* (Sheldrick, 2008); molecular graphics: *ORTEP-3* (Farrugia, 1997) and *PLATON* (Spek, 2009); software used to prepare material for publication: *WinGX* (Farrugia, 1999) and *PLATON*.

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Supplementary data and figures for this paper are available from the IUCr electronic archives (Reference: HB5535).

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