

2-(2-Thienyl)-4,5-dihydro-1H-imidazole. Corrigendum

Reza Kia,^{a‡} Hoong-Kun Fun^{a*§} and Hadi Kargar^b

^aX-ray Crystallography Unit, School of Physics, Universiti Sains Malaysia, 11800 USM, Penang, Malaysia, and ^bDepartment of Chemistry, School of Science, Payame Noor University (PNU), Ardakan, Yazd, Iran
Correspondence e-mail: hkfun@usm.my

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Key indicators: single-crystal X-ray study; $T = 100$ K; mean $\sigma(\text{C}-\text{C}) = 0.001$ Å; R factor = 0.027; wR factor = 0.080; data-to-parameter ratio = 32.3.

Consideration of a previous unrecognized twinning of the original investigated crystal of the title compound [Kia *et al.* (2009). *Acta Cryst.* **E65**, o301] led to improved reliability factors and to a slightly higher precision for all geometric parameters. The crystal under investigation was twinned by pseudo-merohedry with $[100, 0\bar{1}0, 00\bar{1}]$ as the twin matrix and a refined twin domain fraction of 0.9610 (5):0.0390 (5). The results of the new crystal structure refinement are given here.

Experimental

Crystal data

$\text{C}_7\text{H}_8\text{N}_2\text{S}$
 $M_r = 152.21$
Monoclinic, $P2_1/c$
 $a = 6.1321$ (2) Å
 $b = 11.5663$ (3) Å
 $c = 10.0098$ (3) Å
 $\beta = 90.154$ (1)°

$V = 709.95$ (4) Å³
 $Z = 4$
Mo $K\alpha$ radiation
 $\mu = 0.37$ mm⁻¹
 $T = 100$ K
 $0.54 \times 0.28 \times 0.22$ mm

Data collection

Bruker SMART APEXII CCD
area-detector diffractometer
Absorption correction: multi-scan
(*SADABS*; Bruker, 2005)
 $T_{\min} = 0.825$, $T_{\max} = 0.922$

28316 measured reflections
3100 independent reflections
3040 reflections with $I > 2\sigma(I)$
 $R_{\text{int}} = 0.021$

Refinement

$R[F^2 > 2\sigma(F^2)] = 0.027$
 $wR(F^2) = 0.080$
 $S = 1.15$
3100 reflections
96 parameters

H atoms treated by a mixture of independent and constrained refinement
 $\Delta\rho_{\max} = 0.52$ e Å⁻³
 $\Delta\rho_{\min} = -0.24$ e Å⁻³

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

$D-H\cdots A$	$D-H$	$H\cdots A$	$D\cdots A$	$D-H\cdots A$
$\text{N1}-\text{H1}\cdots\text{N2}^i$	0.857 (16)	2.130 (16)	2.9803 (10)	171.5 (16)
$\text{C3}-\text{H3A}\cdots\text{N2}^i$	0.95	2.59	3.4815 (11)	156

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

Data collection: *APEX2* (Bruker, 2005); cell refinement: *S SAINT* (Bruker, 2005); data reduction: *S SAINT*; program(s) used to solve structure: *SHELXTL* (Sheldrick, 2008); program(s) used to refine structure: *SHELXTL* (Sheldrick, 2008); molecular graphics: *SHELXTL* (Sheldrick, 2008); software used to prepare material for publication: *SHELXTL* (Sheldrick, 2008) and *PLATON* (Spek, 2009).

Supplementary data and figures for this paper are available from the IUCr electronic archives (Reference: WM2233).

References

- Bruker (2005). *APEX2*, *S SAINT* and *SADABS*. Bruker AXS Inc. Madison, Wisconsin, USA.
Kia, R., Fun, H.-K. & Kargar, H. (2009). *Acta Cryst.* **E65**, o301.
Sheldrick, G. M. (2008). *Acta Cryst.* **A64**, 112–122.
Spek, A. L. (2009). *Acta Cryst.* **D65**, 148–155.

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