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6-[4-(2-Chloroethyloxy)naphthyl]fulvene. Corrigendum

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In the paper by Li, Ma, Huang & Dong [*Acta Cryst.* (2005), E**61**, o3901–o3902], the correspondence author is incorrectly indicated. The correct correspondence author is given here, together with revised postal and e-mail addresses.

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6-[4-(2-Chloroethyloxy)naphthyl]fulvene

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Key indicators

Single-crystal X-ray study T = 298 KMean $\sigma(\text{C-C}) = 0.004 \text{ Å}$ R factor = 0.062 wR factor = 0.145Data-to-parameter ratio = 17.5

For details of how these key indicators were automatically derived from the article, see http://journals.iucr.org/e.

The title compound, $C_{18}H_{15}CIO$, has been synthesized by reacting cyclopentadiene with 4-(2-chloroethyloxy)naphth-aldehyde. The naphthalene and cyclopentadienyl rings make a dihedral angle of 42.4 (1)°.

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Comment

Fulvene is widely used in organic synthesis because of its special structure and characteristic reactivity (Stone & Little, 1984). It is well known that fulvene is a good candidate for the synthesis of organometallic coordination polymers or supramolecular complexes (Wang *et al.*, 2003).

We prepared the title compound, (I), which is a new fulvene derivative (see scheme). Single-crystal analysis of (I) reveals that the asymmetric unit consists of one molecule (Fig. 1). The naphthalene and cyclopetadienyl rings make a dihedral angle of 42.4 (1)°. The dihedral angle between the plane defined by atoms O1/C11/C12 and the naphthalene ring plane is 7.9 (2)°. The largest dimension of the molecule, estimated as the C11···H3 separation, is 12.65 Å (H3 is bonded to C3). Other dimensions (Table 1) are as expected.

Experimental

All organic solvents were of reagent grade and were used without further purification. Cyclopentadiene and 4-(2-chloroethyloxy)-naphthaldehyde were prepared according to the literature methods (Korach *et al.*, 1973; Wang *et al.*, 2003). A solution of tetrahydropyrrole (0.5 ml) in methanol (5 ml) was added to a solution of 4-(2-chloroethyloxy)naphthaldehyde (0.75 g, 3.20 mmol) and cyclopentadiene (1.17 ml, 14 mmol) in CH₂Cl₂ (10 ml). The mixture was stirred overnight at 298 K, and then acetic acid (0.42 ml) and water (5 ml) were added. The product was extracted with CH₂Cl₂ and purified by column chromatography on silica gel using CH₂Cl₂as eluant to afford (I) as an orange solid (0.75 g, 83%). Single crystals of (I) were obtained by layering *n*-hexane on to a CH₂Cl₂ solution of the crude reaction product. Single crystals were obtained after a period of one week at 298 K.

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Crystal data

 $C_{18}H_{15}ClO$ $M_r = 282.75$ Mo $K\alpha$ radiation Cell parameters from 1401 Orthorhombic, Pbca reflections a = 12.764 (9) Å $\theta = 3.1-20.1^{\circ}$ b = 7.361 (5) Å $\mu = 0.25 \text{ mm}^{-1}$ c = 31.03 (2) Å T = 298 (2) K $V = 2915 (4) \text{ Å}^3$ Needle, orange Z = 8 $0.40 \times 0.12 \times 0.07 \text{ mm}$ $D_x = 1.288 \text{ Mg m}^{-3}$

Data collection

Bruker SMART CCD area-detector diffractometer 31764 reflections with $I > 2\sigma(I)$ φ and ω scans $R_{\rm int} = 0.071$ Absorption correction: multi-scan $(SADABS; {\rm Bruker}, 1999)$ $h = -15 \rightarrow 16$ $k = -9 \rightarrow 8$ 16129 measured reflections $l = -39 \rightarrow 39$

Refinement

 $\begin{array}{lll} \mbox{Refinement on } F^2 & w = 1/[\sigma^2(F_{\rm o}^2) + (0.0557P)^2 \\ R[F^2 > 2\sigma(F^2)] = 0.062 & + 0.0844P] \\ wR(F^2) = 0.145 & \mbox{where } P = (F_{\rm o}^2 + 2F_{\rm c}^2)/3 \\ S = 1.02 & (\Delta/\sigma)_{\rm max} < 0.001 \\ 3175 \mbox{ reflections} & \Delta\rho_{\rm max} = 0.15 \mbox{ e Å}^{-3} \\ 181 \mbox{ parameters} & \Delta\rho_{\rm min} = -0.17 \mbox{ e Å}^{-3} \end{array}$

Table 1Selected geometric parameters (Å, °).

C1-C2	1.324 (3)	C10-O1	1.362 (3)
C3-C4	1.332 (4)	C11-O1	1.428 (3)
C5-C6	1.345 (3)	C11-C12	1.489 (3)
C6-C7	1.457 (3)	C12-Cl1	1.770 (3)
C5-C6-C7	127.5 (2)	C10-O1-C11	118.32 (19)

All H atoms were included in calculated positions and refined as riding on their carrier C atoms, with $U_{\rm iso}({\rm H})=1.2U_{\rm eq}({\rm C})$ and C-H

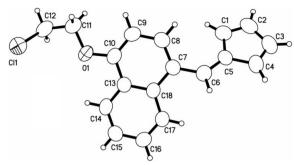


Figure 1 The structure of (I), with the atom-numbering scheme. Displacement ellipsoids are drawn at the 50% probability level and H atoms are shown as small spheres of arbitrary radii.

distances constrained to 0.93 (aromatic CH) or 0.97 Å (methylene CH_2).

Data collection: *SMART* (Bruker, 1999); cell refinement: *SAINT* (Bruker, 1999); data reduction: *SAINT*; program(s) used to solve structure: *SHELXS97* (Sheldrick, 1997); program(s) used to refine structure: *SHELXL97* (Sheldrick, 1997); molecular graphics: *SHELXTL* (Bruker, 1999); software used to prepare material for publication: *SHELXTL*.

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