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Crystallographic report

Bis(*m*-nitrobenzoato)bis(pyridine)zinc(II)

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The molecular structure of $[Zn(O_2CC_6H_4NO_2\text{-}m)_2(pyridine)_2]$ exhibits a distorted N_2O_2 tetrahedral geometry; the molecule has two fold symmetry. Copyright © 2004 John Wiley & Sons, Ltd.

KEYWORDS: crystal structure; zinc; *m*-nitrobenzoate; pyridine

COMMENT

The zinc atom in $[Zn(O_2CC_6H_4NO_2\text{-}m)_2(pyridine)_2]$, Fig. 1, lies on a two fold axis and is in a distorted tetrahedral N_2O_2 coordination environment defined by two nitrogen atoms of the pyridine molecules and two oxygen atoms derived from the monodentate *m*-nitrobenzoate ligands. The structure is similar, for example, to those reported for $[zinc(2\text{-pyrrolecarboxylato})_2(1\text{-methylimidazole})_2]$[1] and $[Zn(O_2CCH_3)_2(pyridine)_2]$.[2]

EXPERIMENTAL

An aqueous solution of ZnO (1.0 mmol) was added to a 50% ethanol solution of *m*-nitrobenzoic acid (2.0 mmol) and pyridine (2.0 mmol) and stirred for 8.0 h at 30 °C. The white solid was obtained by filtration. The product was recrystallized from ethanol solution to give colorless crystals, m.p. 178–179 °C. Intensity data were collected at 298 K on a Bruker Smart 1000 CCD for a block $0.27 \times 0.39 \times 0.45$ mm^3. $C_{24}H_{18}N_4O_8Zn$, $M = 555.79$, monoclinic, $C2/c$, $a = 14.982(6)$, $b = 6.372(3)$, $c = 24.808(10)$ Å, $\beta = 90.852(6)°$, $V = 2367.9(17)$ Å^3, $Z = 4$, 2093 unique data ($\theta_{max} = 25.0°$), $R = 0.030$ (1753 data with $I > 2\sigma(I)$), $wR = 0.072$ (all data). Programs used: SHELXL and ORTEP. CCDC deposition number: 247032.

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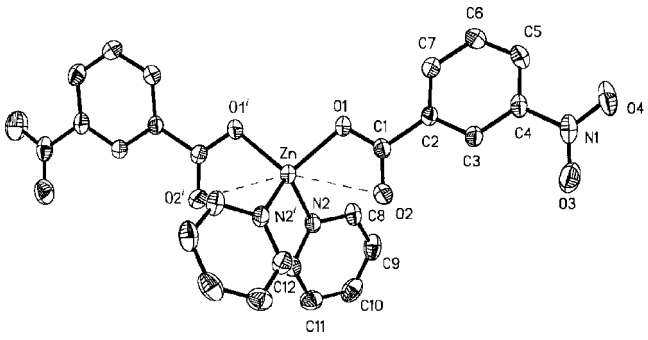

Figure 1. The molecular structure of $[Zn(O_2CC_6H_4NO_2\text{-}m)_2(pyridine)_2]$. Key geometric parameters: Zn–O1 1.9611(16), Zn1–N2 2.0411(18), Zn···O2 2.7782(18) Å; O1–Zn–N2 105.98(7), O1–Zn–O1^i, 101.77(9), O1–Zn–N2^i 118.54(7), N2–Zn–N2^i 106.72(11)°. Symmetry code *i*: $1 - x$, y, $3/2 - z$.

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