Accepted Manuscript

Research paper

Reactivity of hemilabile pyridyl- and methyl-substituted pyrimidylselenolates with $[MCl_2(dppf)]$ (M = Pd, Pt; dppf = bis(diphenylphisphino)ferrocene)

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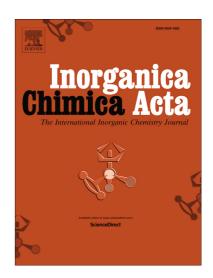
PII: S0020-1693(18)30176-2

DOI: https://doi.org/10.1016/j.ica.2018.03.034

Reference: ICA 18179

To appear in: Inorganica Chimica Acta

Received Date: 31 January 2018 Revised Date: 20 March 2018 Accepted Date: 21 March 2018



Please cite this article as: R.S. Chauhan, D.B. Cordes, A.M.Z. Slawin, S. Yadav, C. Dash, Reactivity of hemilabile pyridyl- and methyl-substituted pyrimidylselenolates with [MCl₂(dppf)] (M = Pd, Pt; dppf = bis(diphenylphisphino)ferrocene), *Inorganica Chimica Acta* (2018), doi: https://doi.org/10.1016/j.ica.2018.03.034

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ACCEPTED MANUSCRIPT

Reactivity of hemilabile pyridyl- and methyl-substituted pyrimidylselenolates

with [MCl₂(dppf)] (M = Pd, Pt; dppf = bis(diphenylphisphino)ferrocene)

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Abstract:

The bis(diphenylphisphino)ferrocene (dppf) derived palladium analogue of [PdCl₂(dppf)]

on reaction with the sodium salt of pyridyl/pyrimidyl selenolate yielded mononuclear cis

configured complex [Pd(SeAr)₂(dppf)] (Ar = C_5H_4N , $C_4H(4,6-Me)_2N_2$), as did the platinum

precursor [PtCl₂(dppf)] with methyl substituted pyrimidyl salt giving [Pt{SeC₄H(4,6-

Me)₂N₂}₂(dppf)]. In contrast, the reaction of platinum precursor with the sodium salt of

 $[Pt_2(\mu-SeC_5H_4N)_2(dppf)_2]^{2+}$ pyridylselenolate different complexes gave and two

[Pt(Cl)(SeC₅H₄N)(dppf)] depending in the reaction solvent. These complexes were characterized

by elemental analysis and NMR (¹H, ³¹P) spectroscopy. The molecular structure of

[Pt{SeC₄H(4,6-Me)₂N₂}₂(dppf)] was established by single crystal X-ray diffraction analysis.

Keywords: Selenolate, NMR, X-ray, dppf.

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