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Synthesis, characterization and coordination chemistry of (Pyrazolylphosphinite)palladium(II) complexes

Juliana M. Edor¹, Gershon Amenuvor¹, Collins Obuah^{*1,2}, Alfred Muller¹, James Darkwa¹

¹Department of Chemistry, University of Johannesburg, Auckland Park, 2006 Johannesburg, South Africa. ²Department of Chemistry, University of Ghana, Legon, Ghana. Email: cobuah@ug.edu.gh

Abstract

Pyrazolylethylphosphinite compounds, **L1** (2-(3,5-dimethyl-1H-pyrazol-1-yl)ethyldiphenylphosphinite) and **L2** (2-(3,5-di-tert-butyl-1H-pyrazol-1-yl)ethyldiphenylphosphinite) were reacted with the palladium(II) precursors [PdCl(CH₃)(COD)] and [PdCl₂(NCCH₃)₂] resulted in the formation of five novel complexes, produced from disproportionation reaction and have very interesting coordination chemistry. The results further emphasize the coordination versatility of pyrazolylphosphinite ligands towards palladium(II) metal centres.

Keywords: Pyrazolylphosphinite, palladium, coordination, disproportionation

1. Introduction

In metal coordination compounds, the properties of compounds are largely determined by the nature of ligands that are bound to the metal ion [1]. The coordination chemistry of pyrazoles is of much interest and has been extensively reviewed [2] since pyrazole and pyrazolyl ligands are

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