

## Preliminary communication

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### The reaction of methylenecyclobutane with $\text{PdCl}_2$ and $[\text{Rh}(\text{CO})_2\text{Cl}]_2$ : a re-examination

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In a recent paper<sup>1</sup> we reported that methylenecyclobutane reacts with  $\text{PdCl}_2$  and  $[\text{Rh}(\text{CO})_2\text{Cl}]_2$  to give  $\pi$ -allylic complexes of palladium(II) and rhodium(III). We have now found that pure spiropentane reacts with  $\text{PdCl}_2$  at  $60^\circ$  to give a mixture of the complexes denoted (II) and (III) in ref. 1, in the ratio of 3/1. Furthermore, spiropentane reacts rapidly with  $[\text{Rh}(\text{CO})_2\text{Cl}]_2$  to give complex (IV). These findings prompted us to re-examine our previous results, and we have now found that very pure methylenecyclobutane reacts with  $\text{PdCl}_2$  to give stable products which have not yet fully been characterized. From the reaction with  $[\text{Rh}(\text{CO})_2\text{Cl}]_2$  a rhodium olefin complex has been obtained.

Our conclusion is that the formation of the  $\pi$ -allylic complexes (II), (III), and (IV) described in our earlier work must be attributed to some spiropentane impurities in the starting methylenecyclobutane. The error in our previous work does not affect the validity of the structures proposed for the complexes (II)–(IV).

#### ACKNOWLEDGEMENT

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#### REFERENCE

- 1 R. Rossi, P. Diversi and L. Porri, *J. Organometal. Chem.*, 31 (1971) C40.