

## Orthometallation of tris(3-sodium sulfonatophenyl)phosphine with dirhodium(II) acetate.

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### Rok wydania

1998

### Czasopismo

Organometallics

### Numer woluminu

17

### Strony

3684-3689

### DOI

10.1021/om9800703

### Kolekcja

Naukowa

### Język

Angielski

### Typ publikacji

Artykuł

### Streszczenie

Tetraacetatodirhodium(II) reacts with tris(3-sodium sulfonatophenyl)phosphine (TPPTS) giving  $[\text{Rh}_2(\text{OOCCH}_3)_3\{\text{C}_6\text{H}_4\text{SO}_3\text{Na}\}_2(\text{HOOCCH}_3)] \cdot 6\text{H}_2\text{O}$  (1) and  $[\text{Rh}_2(\text{OOCCH}_3)_2\{\text{C}_6\text{H}_4\text{SO}_3\text{Na}\}_2(\text{HOOCCH}_3)] \cdot 12\text{H}_2\text{O}$  (2). Their structures and properties have been studied by electronic, IR, and  $^{31}\text{P}\{^1\text{H}\}$ ,  $^1\text{H}\{^{31}\text{P}\}$ , and  $^{13}\text{C}\{^1\text{H}\}$  NMR spectroscopies. In compound 1, one of the acetate bridges is replaced by a phosphine ligand, orthometalated via the C2 carbon atom of the phenyl ring. One axial site of the  $\text{Rh}_2^{2+}$  core is occupied by a sulfonato group of the metalated ring and another one by a labile molecule of acetic acid.  $^1\text{H}$  NMR spectroscopy shows that chemical shifts of the aromatic protons depend on the nature of the axial ligands. Compound 2 contains two orthometalated molecules of TPPTS with a head-to-head structure, and one of these ligands is metalated via the C2 atom and another one via C6.

### Adres publiczny

<http://doi.org/10.1021/om9800703>

### Strona internetowa wydawcy

<https://www.acs.org/content/acs/en.html>