

Tetrakis(Acetato) Dirhodium(II), [Rh₂(O₂CCH₃)₄]

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Tetrakis(acetato) dirhodium(II), [Rh₂(O₂CCH₃)₄], was reacted with several functionalized benzonitriles, NCR. The resulting compounds were characterized via single crystal x-ray crystallography, ¹H-NMR spectroscopy, and FT-IR spectroscopy. 1 mole % of the [Rh₂(O₂CCH₃)₄] • 4-(dimethylamino)benzonitrile novel compound was placed in dichloromethane (CH₂Cl₂) and styrene.

A dilute solution of ethyl diazoacetate in CH₂Cl₂ was then added over 8 hr. via syringe pump while the solution was kept under a positive pressure of nitrogen gas. Preliminary results indicate the cis/trans ratio of catalytically produced cyclopropanes was different from the same reaction with [Rh₂(O₂CCH₃)₄] alone.