Das Koordinationsverhalten des Acetylendisulfids Bis(benzylthio)acetylen gegenüber nullwertigen Metallkomplexen des W, Co und Pt

The Coordination Behavior of the Acetylenedisulfide Bis(benzylthio)acetylene with Zero-valent Metal Complexes of W, Co and Pt

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Synthesis and characterization of the alkyne complexes $[Co_2(CO)_6(L)]$, $[W(CO)(L)_3]$ and $[Pt(PPh_3)_2(L)]$ with L = $BnSC_2SBn$ (Bn = benzyl) are described. X-Ray diffraction studies of $[W(CO)(L)_3]$ and $[Co_2(CO)_5(L)]_2$ reveal that the donor ability of the sulfide group depends on the electronic and steric situation in the particular metal complex. The specific donor strength of sulfide-substituted alkynes in their complexes is discussed considering the IR and NMR spectroscopic data.

Key words: Dithioalkynes, Alkyne Complexes, Organometallic Compounds, Crystal Structure