

A new versatile binuclear seven-coordinate complex of molybdenum(II), $[(\mu\text{-Cl})_2\{\text{Mo}(\mu\text{-Cl})(\text{SnCl}_3)(\text{CO})_3\}_2]^{2-}$.

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Streszczenie

The two new seven-coordinate anionic complexes of molybdenum(II), binuclear $[(\mu\text{-Cl})_2\{\text{Mo}(\mu\text{-Cl})(\text{SnCl}_3)(\text{CO})_3\}_2]^{2-}$ and mononuclear $[\text{MoCl}_3(\text{GeCl}_3)(\text{CO})_3]^{2-}$, have been synthesized and characterized by single-crystal X-ray diffraction studies. The binuclear complex exhibits a unique mode of reactivity towards norbornene. In a strictly anhydrous atmosphere the binuclear complex effectively initiates the ring-opening metathesis polymerization reaction of norbornene, but in the presence of water norbornene is efficiently transformed to the binorbornyl ether $(\text{C}_7\text{H}_{11})_2\text{O}$.

Słowa kluczowe

Molybdenum(II), Stannyl ligand, Germyl ligand, Heterobimetallic complexes, Ring opening metathesis polymerization, Etherification catalyst

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