A new versatile binuclear seven-coordinate complex of molybdenum(II),$[(\mu\text{-}Cl)_2\{Mo(\mu\text{-}Cl)(SnCl_3)(CO)_3\}_2]^{2-}$.

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The two new seven-coordinate anionic complexes of molybdenum(II), binuclear $[(\mu\text{-}Cl)_2\{Mo(\mu\text{-}Cl)(SnCl_3)(CO)_3\}_2]^{2-}$ and mononuclear $[MoCl_3(GeCl_3)(CO)_3]^{2-}$, 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 $(C_7H_{11})_2O$.

Słowa kluczowe

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

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