

Die (1-Cyclohepta-2,4,6-trienyl)thiolato-verbrückten Zweikernkomplexe – $\text{Mn}_2(\text{CO})_8(\mu_2\text{-SC}_7\text{H}_7)_2$ und $\text{Mn}_2(\text{CO})_6(\text{C}\equiv\text{N}^t\text{Bu})_2(\mu_2\text{-SC}_7\text{H}_7)_2$

The (1-Cyclohepta-2,4,6-trienyl)thiolato-Bridged Dinuclear Complexes
 $\text{Mn}_2(\text{CO})_8(\mu_2\text{-SC}_7\text{H}_7)_2$ and $\text{Mn}_2(\text{CO})_6(\text{C}\equiv\text{N}^t\text{Bu})_2(\mu_2\text{-SC}_7\text{H}_7)_2$

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Z. Naturforsch. **59b**, 673 – 680 (2004); eingegangen am 2. Februar 2004

Herrn Prof. Dr. Ingo-Peter Lorenz zum 60. Geburtstag gewidmet

The reactions of either $\text{Mn}_2(\text{CO})_{10}$ (under irradiation) or $\text{Mn}(\text{CO})_5\text{X}$ ($\text{X} = \text{Cl}, \text{Br}$) with di(1-cyclohepta-2,4,6-trienyl) sulfide, $\text{S}(\text{C}_7\text{H}_7)_2$ (**1**), led to the organothiolato-bridged dimer $[\text{Mn}(\text{CO})_4(\mu_2\text{-SC}_7\text{H}_7)]_2$ (**2**) in addition to ditropyl, $(\text{C}_7\text{H}_7)_2$. Subsequent substitution of two carbonyl ligands in **2** for *tert*-butyl isocyanide gave $[\text{Mn}(\text{CO})_3(\text{C}\equiv\text{N}^t\text{Bu})(\mu_2\text{-SC}_7\text{H}_7)]_2$ (**3**). The molecular structures of the centrosymmetric dimers **2** and **3** have been determined by X-Ray crystallography. Both **2** and **3** contain a planar Mn_2S_2 core with the 1-cyclohepta-2,4,6-trienyl substituents in *anti*-position. The structural parameters of dinuclear carbonylmanganese complexes containing organothiolato or thioether bridges are discussed.

Key words: Di(1-cyclohepta-2,4,6-trienyl) Sulfide, Thiolato Complexes, Manganese Complexes