Reactions of tin tetrachloride with diethyl glutarate. Crystal structures of $[Sn_2Cl_8\{\mu\text{-}C_3H_6(CO_2Et)_2\}_2]\cdot 2CH_2Cl_2$ and *cis*-$[SnCl_4(H_2O)_2]\cdot C_3H_6(CO_2Et)_2$.

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Streszczenie

The dimeric compound $[Sn_2Cl_8\{\mu\text{-}C_3H_6(CO_2Et)_2\}_2]\cdot 2CH_2Cl_2$1 has been prepared by direct reaction of $SnCl_4$ with diethyl glutarate in CH_2Cl_2 and its crystal structure has been determined. Each tin atom is octahedrally co-ordinated by four chlorine atoms and two mutually cis carbonyl oxygen atoms of two bridging diethyl glutarate molecules. During the crystallization of 1 the compound cis-$[SnCl_4(H_2O)_2]\cdot C_3H_6(CO_2Et)_2$2 was formed under the influence of moisture. Its crystal structure revealed a monomeric complex of Sn^{IV} in which each tin atom is surrounded octahedrally by four chlorine atoms and two water oxygen atoms. A non-co-ordinated ester molecule is hydrogen bonded through carbonyl oxygen atoms to one water molecule.

Adres publiczny

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