

Reactions of TiCl_4 with diesters : crystal structures of $[\text{CH}_2(\text{CO}_2\text{Et})_2\text{Cl}_4\text{Ti}]$ and $[\text{C}_2\text{H}_4(\text{CO}_2\text{CH}_2\text{CH}_2\text{OPh})_2\text{Cl}_4\text{Ti}]$.

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Direct reactions of TiCl_4 with diethyl malonate in n-hexane or with bis(2-phenoxyethyl) succinate in toluene yield the crystalline compounds $[\text{CH}_2(\text{CO}_2\text{Et})_2\text{Cl}_4\text{Ti}]$ (**1**) and $[\text{C}_2\text{H}_4(\text{CO}_2\text{CH}_2\text{CH}_2\text{OPh})_2\text{Cl}_4\text{Ti}]$ (**2**), respectively. The crystal structures of both complexes have been determined by a single crystal X-ray diffraction study, and refined by full-matrix least-squares techniques to an R of 0.034 and 0.038 for **1** and **2**, respectively. Crystals of **1** are monoclinic, space group $P2_1/c$, $Z = 4$, $a = 7.716(10)$, $b = 18.21(2)$, $c = 12.384(10)$ Å, $\beta = 127.29(8)^\circ$. Crystals of **2** are triclinic, space group P , $Z = 2$, $a = 8.680(12)$, $b = 10.178(11)$, $c = 14.398(15)$ Å, $\alpha = 78.45(9)$, $\beta = 74.16(9)$, $\gamma = 88.45(9)^\circ$. The titanium atoms in **1** and **2** are octahedrally coordinated by four chlorine atoms and two carbonyl oxygen atoms of coordinated diester molecules. The titanium atoms and the chelate ligand atoms form the six-membered ring in **1** and the seven-membered ring in **2**.

Adres publiczny

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