

Synthesis and X-ray Crystal Structure of $[(C_5Ph_5)CrCl(\mu-Cl)_2Tl]_2$: An Example of the Rare M-X-Tl^I Linkage (X = Halide)

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Abstract

Reaction of solid TlCl with $[(C_5Ph_5)CrCl(\mu-Cl)]_2$ in CH_2Cl_2 solvent yields the monomeric complex $(C_5Ph_5)CrCl(\mu-Cl)_2Tl$ in 80% isolated yield. The C_5H_5 and C_5Me_5 analogues do not react with TlCl suggesting a steric basis for the reaction of the C_5Ph_5 material.

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