

Bulky aryloxo organotitanium chlorides

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The last few years have witnessed a sudden interest in the chemistry of titanium aryloxides due to their use as Diels–Alder¹ and cross coupling/oligomerization catalysts². There have also been reports on the use of [(ArO)(C₅H₅)TiCl₂] for the preparation of cationic alkyl derivatives of titanium³.

In view of the proven ability of C₅Me₅ ligand (Cp*) in stabilizing organotitanium compounds, it is of interest to generate bulky aryloxo derivatives of Cp*TiCl₃. Thus, the reaction of Cp*TiCl₃ with various phenols in a 1:1 ratio in the presence of Et₃N affords the aryloxides of the formula [(ArO)Cp*TiCl₂] (Ar = 4-MeC₆H₄, 2,6-Me₂C₆H₃, 2,6-*i*Pr₂C₆H₃, 2,6-*t*Bu₂-4-MeC₆H₂) in nearly quantitative yields. The details of this investigation are discussed in this presentation.

References

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