REACTIVITY OF GERMANIUM ALKOXIDES WITH MULTIPLE BOND SYSTEMS

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There have been only a few studies focusing on divalent germanium alkoxides and their reactivity to determine their nucleophility in comparison to their transition metal counterparts^[1]. Therefore we present an insight on the reactivity of new germanium compounds, where we have altered the Ge-O bond strength by both changing the ligand and by choosing a variety of alkoxides. Reactions with several multiple bond systems showed different outcomes depending on the bond strength, resulting in products of insertion, oxidation and oxidative addition.

NC Dipp Dipp NCX
$$t$$
-Bu t -B

Fig 1: Reactivity of germanium alkoxides

^[1] L. Ferro, P. B. Hitchcock, M. P. Coles, J. R. Fulton. *Reactivity of divalent germanium alkoxide complexes is in sharp contrast to the heavier tin and lead analogues*. Inorg. Chem. **2012**, *51*, 1544-1551.