

Stabile Carben-Addukte des Chlors [1]

Stable Carbene Adducts of Chlorine [1]

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The carbene adducts **3a-c** ($R^1 = \text{Me, Et, } i\text{-Pr}$; $R^2 = \text{Me}$) are formed from the 2,3-dihydroimidazol-2-ylidenes **1a-c** and 1,2-dichloroethane as air-sensitive solids in good yields. The compounds exhibit a reactive Cl-Cl bond. Benzene is chlorinated by **3a,b** to give chlorobenzene and the imidazolium salts **10a,b** under mild conditions. **3c** acts as a chloride donor to give with AlCl_3 and SO_2 the 2-chloroimidazolium salts **12c** and **13c** ($X = \text{AlCl}_4, \text{SO}_2\text{Cl}$). On hydrolysis, the less reactive hydrate salt **14c** is formed from **3c**. The X-ray structures of **10a** and **14c** are reported.

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