

Organometallic compounds of Mg and Li: Use in synthesis of organic compounds

Alkyl halides, RX, react with magnesium metal in ether or tetrahydrofuran (THF) solvent to yield alkylmagnesium halides, RMgX. The products, called **Grignard reagents (RMgX)** after their discoverer, Victor Grignard, are examples of **organometallic compounds** because they contain a carbon-metal bond. In addition to alkyl halides, Grignard reagents can also be made from alkenyl (vinylic) and aryl (aromatic) halides. The halogen can be Cl, Br, or I, although chlorides are less reactive than bromides and iodides. Organofluorides rarely react with magnesium.

