

In Groups V (15) and VI (16), the diatomic molecules of Period 2 depend on the formation of π bonds, which result from the small radius of these atoms. In Period 3, the restriction to single bonds generates larger cyclic molecules.

(c) Si is reacted at high temperature with HCl to produce SiHCl_3 , which is distilled and decomposed to give polycrystalline Si. This is melted, and a single seed crystal inserted and withdrawn to produce a rod-like single crystal of Si.