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6.2 Group 2A: Dihydrogen Bonds X-H· · ·H-Mg and X-H· · ·H-Be (X = F, Cl, Br, NH(3), NNN, CN, NC, ClCC, FCC, HCC, CH(3)CC, F(2)Be, FKr, FAr)

Sommario/riassunto

This definitive reference consolidates current knowledge on dihydrogen bonding, emphasizing its role in organizing interactions in different chemical reactions and molecular aggregations. After an overview, it analyzes the differences between dihydrogen bonds, classical hydrogen bonds, and covalent bonds. It describes dihydrogen bonds as intermediates in intramolecular and intermolecular proton transfer reactions. It describes dihydrogen bonding in the solid-state, the gas phase, and in solution. This is the premier reference for physical chemists, biochemists, biophysicists, and chemical engi