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Aldehydes and Ketones; 2.3 Cyclization of Sulfur and Selenium Compounds; 2.4 Cyclization of Nitrogen Compounds
2.4.1 Cyclization of Acetylenic Amines 2.4.2 Cyclization of Acetylenic Amides; 2.4.3 Cyclization of Acetylenic Carbamates; 2.4.4 Cyclization of Acetylenic Sulfonamides; 2.4.5 Cyclization of Acetylenic Enamines and Imines; 2.4.6 Cyclization of Other Acetylenic Nitrogen Functional Groups; 2.5 Cyclization of Carbon onto Acetylenes; 2.5.1 Cyclization of Acetylenic Carbonyl Compounds and Derivatives; 2.5.2 Cyclization of Diacetylenes; 2.5.3 Cyclization of Aryl Acetylenes; 2.5.4 Cyclization of Acetylenic Organometallics; 2.6 Conclusions; 2.7 Representative Experimental Procedures
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3 Addition of Terminal Acetylides to CO and CN Electrophiles 3.1 Introduction; 3.2 Background; 3.3 Additions with Stoichiometric Amounts of Metal Acetylides; 3.4 Nucleophilic CO Additions involving the Use of Zn(II) Salts; 3.5 Acetylene Additions to CN Electrophiles; 3.6 Conclusion; 3.7 Experimental Procedures; 3.7.1 General Procedure for the Enantioselective Alkynylation of Aldehydes by the Use of Stoichiometric Amounts of Zn(OTf)₂; 3.7.2 General Procedure for the Zn(OTf)₂-Catalyzed Enantioselective Alkynylation of Aldehydes 3.7.3 General Procedure for the Enantioselective Alkynylation of Ketones Catalyzed by Zn(salen) Complexes

Sommario/riassunto

Acetylenes are an important and valuable class of compounds in organic synthesis. This book expands on this historically well-established concept, while incorporating the many new developments that have widened the number of applications in this field. It remains the only handbook available that embodies all the important facets of acetylene chemistry. Following the first section on synthesis, the leading authors deal with advanced materials before turning to the properties and theory of acetylenes, while a final section looks at the biological aspects. With its range of experimental proced
