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III. CHOOSING SOLVENTS TO INCREASE REACTION RATES AND MINIMIZE IMPURITIES
IV. IMPURITIES IN SOLVENTS AND REACTIONS OF SOLVENTS;
V. WATER AS SOLVENT; VI. SOLVENT SUBSTITUTIONS; VII. SOLVENT-FREE PROCESSES; VIII. SUMMARY AND PERSPECTIVE; REFERENCES;
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Chapter 7 - In-Process Assays, In-Process Controls, and Specifications
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VII. SIMPLE PROCEDURES
VIII. IMPACT OF IPCS ON PROCESSING; IX. CONSIDER THE VOLATILITY OF REACTION COMPONENTS, AND USE OF PRESSURE; X. PRACTICAL CONSIDERATIONS FOR EFFICIENT WORKUPS AND ISOLATIONS; XI. ADDITIONAL CONSIDERATIONS FOR KILO LAB OPERATIONS; XII. SUMMARY AND PERSPECTIVE; REFERENCES;
Chapter 9 - Optimizing Processes by Minimizing Impurities; I. INTRODUCTION; II. BENEFITS AND LIMITATIONS OF HETEROGENEOUS PROCESSING; III. DECREASE SIDE PRODUCTS BY DECREASING DEGRADATION OF STARTING MATERIALS; IV. CONTROLLING PH; V. ADDITION SEQUENCE, DURATION OF ADDITION, AND TIME BETWEEN ADDITIONS
VI. TEMPERATURE CONTROL

Sommario/riassunto

"Designed to provide a comprehensive, step-by-step approach to organic process research and development in the pharmaceutical, fine chemical, and agricultural chemical industries, this book describes the steps taken, following synthesis and evaluation, to bring key compounds to market in a cost-effective manner. It describes hands-on, step-by-step, approaches to solving process development problems, including route, reagent, and solvent selection; optimising catalytic reactions; chiral syntheses; and green chemistry"--
