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Biocatalysis in ionic liquids; 2.4 The future of ionic liquids; 2.5 Experimental part; 2.5.1 Preparation of [bmim][Cl]
2.5.2 Preparation of [bmim][PF6]2.5.3 Preparation of a chiral imidazolium ionic liquid; 2.5.4 Enantioselective hydrogenation of methyl acetoacetate; 2.5.5 Epoxidation of 2,2-dimethylchromene; 2.5.6 Mizoroki-Heck reaction between butyl acrylate and iodobenzene under microwave irradiation; 2.5.7 Diphenylacetylene by the Sonogashira coupling reaction; References; 3 Fluorous solvents; 3.1 Historical background; 3.2 Physical properties; 3.2.1 Key design elements in fluorous/organic liquid biphasic reactions; 3.2.2 Commercial availability; 3.2.3 Polarity; 3.2.4 Solute solubilities
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3.4.2 Solid-phase extractions with fluorous silica gel

Sommario/riassunto

Green, sustainable chemistry involves the designing of chemical processes with a view to reducing or even eliminating the use and production of hazardous materials. Recent endeavors have focused on limiting the use of organic solvents and replacing them with new, environmentally benign media. The chemical industry is interested in these cost-effective, alternative solvents and processes.This book provides a broad overview of the three most commonly used green reaction media. Directed at synthetic organic chemists working in academic and industrial laboratories, it will also ser