1. Record Nr. UNINA9910841350703321 Autore Cotarca L (Livius) **Titolo** Phosgenations [[electronic resource]]: a handbook // L. Cotarca, H. **Eckert** Weinheim,: Wiley-VCH, c2004 Pubbl/distr/stampa **ISBN** 1-280-52018-3 9786610520183 3-527-60503-7 3-527-60262-3 Descrizione fisica 1 online resource (670 p.) Altri autori (Persone) EckertH (Heiner) 661.06812 Disciplina 661.891 Soggetti Phosgene Carbonyl compounds Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di contenuto Phosgenations - A Handbook; Contents; Preface; 1 Contradictions; References: 2 Phosgenation Reagents: 2.1 Phosgene: 2.1.1 Conventional Manufacturing Processes; 2.1.2 Manufacturing Processes "On Demand of Consumer"; 2.2 Phosgene "Oligomers"; 2.2.1 Diphosgene: 2.2.2 Triphosgene: 2.2.2.1 Triphosgene as a Phosgene Equivalent or Phosgene Source; 2.2.2.2 Stability: Thermally and Chemically Induced Decomposition; 2.2.2.3 Preparation; 2.3 Other Phosgene Equivalents and Substitutes; 2.3.1 Oxalyl Chloride; 2.3.2 1,1-Carbonyldiimidazole; 2.3.3 Dimethyl Carbonate (DMC); 2.4 References 3 Evaluation of Phosgenation Reagents 3.1 Definition; 3.2 Reactivity; 3.3 Physical Properties; 3.4 Physiological Data; 3.5 References; 4 Phosgenation Reactions; 4.1 Classification of Phosgenation Reactions; 4.2 Chloroformylation (Chlorocarbonylation); 4.2.1 Chloroformates (Chlorocarbonylation of Alcohols); 4.2.2 Carbamoyl Chlorides (Chlorocarbonylation of Amines); 4.2.2.1 Reactions with Primary Amines; 4.2.2.2 Reactions with Secondary Amines; 4.2.2.3 Reactions

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-Amino Acids

In this manual, the authors compare the range of applications for phosgene with that of the alternative compounds, dealing in detail with the possible uses of diphosgene, triphosgene, carbon dioxide, organic carbonates, oxalylchloride and many other alternative materials used in synthesis. However, they clearly point out those cases where phosgene continues to have the advantage. The result is a mine of information for synthetic chemists working in industry and academia faced with the question of where the toxic phosgene can be replaced by an unproblematic compound - including the safety phosg