

1. Record Nr.	UNINA9910813349603321
Autore	Armarego W. L. F.
Titolo	Purification of laboratory chemicals / / Wilfred L. F. Armarego and Christina Li Lin Chai
Pubbl/distr/stampa	Amsterdam, [Netherlands] : , : Butterworth-Heinemann, , 2003 ©2003
ISBN	1-283-28141-4 9786613281418 0-08-051546-0
Edizione	[Fifth edition.]
Descrizione fisica	1 online resource (627 p.)
Disciplina	542
Soggetti	Chemicals - Purification
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Front Cover; Purification of Laboratory Chemicals; Copyright Page; CONTENTS; Preface to the Fifth Edition; Preface to the First Edition; Preface to the Second Edition; Preface to the Third Edition; Preface to the Fourth Edition; CHAPTER 1. COMMON PHYSICAL TECHNIQUES USED IN PURIFICATION; INTRODUCTION; THE QUESTION OF PURITY; SOURCES OF IMPURITIES; PRACTICES TO AVOID IMPURITIES; SAFETY PRECAUTIONS ASSOCIATED WITH THE PURIFICATION OF LABORATORY CHEMICALS; SOME HAZARDS OF CHEMICAL MANIPULATION IN PURIFICATION AND RECOVERY OF RESIDUES; SAFETY DISCLAIMER METHODS OF PURIFICATION OF REAGENTS AND SOLVENTS SOLVENT EXTRACTION AND DISTRIBUTION; DISTILLATION; RECRYSTALLISATION; SUBLIMATION; CHROMATOGRAPHY; DRYING; MISCELLANEOUS TECHNIQUES; ABBREVIATIONS; TABLES; BIBLIOGRAPHY; CHAPTER 2. CHEMICAL METHODS USED IN PURIFICATION; GENERAL REMARKS; REMOVAL OF TRACES OF METALS FROM REAGENTS; METAL IMPURITIES; DISTILLATION; USE OF ION EXCHANGE RESINS; PRECIPITATION; EXTRACTION; COMPLEXATION; USE OF METAL HYDRIDES; LITHIUM ALUMINIUM HYDRIDE; CALCIUM HYDRIDE; SODIUM BOROHYDRIDE; POTASSIUM BOROHYDRIDE; PURIFICATION via DERIVATIVES; ALCOHOLS; ALDEHYDES; AMINES

AROMATIC HYDROCARBONSCARBOXYLIC ACIDS; HYDROPEROXIDES; KETONES; PHENOLS; PHOSPHATE AND PHOSPHONATE ESTERS; MISCELLANEOUS; GENERAL METHODS FOR THE PURIFICATION OF CLASSES OF COMPOUNDS PROCEDURES; CRITERIA OF PURITY; GENERAL PROCEDURES FOR THE PURIFICATION OF SOME CLASSES OF ORGANIC COMPOUNDS; ACETALS; ACIDS; ACID CHLORIDES; ALCOHOLS; ALDEHYDES; AMIDES; AMINES; AMINO ACIDS; ANHYDRIDES; CAROTENOIDS; ESTERS; ETHERS; HALIDES; HYDROCARBONS; IMIDES; IMINO COMPOUNDS; KETONES; MACROMOLECULES; NITRILES; NITRO COMPOUNDS; NUCLEIC ACIDS; PHENOLS; POLYPEPTIDES AND PROTEINS; QUINONES; SALTS (ORGANIC)
SULFUR COMPOUNDSBIBLIOGRAPHY; CHAPTER 3. THE FUTURE OF PURIFICATION; INTRODUCTION; SOLID PHASE SYNTHESIS; SOLID PHASE PEPTIDE SYNTHESIS (SPPS); SOLID PHASE DEOXYRIBONUCLEOTIDE SYNTHESIS; SOLID PHASE OLIGOSACCHARIDE SYNTHESIS; SOLID PHASE ORGANIC SYNTHESIS (SPOS); POLYMER SUPPORTED REACTANTS; SCAVENGER RESINS; RESIN SUPPORT; CHOICE OF RESIN FOR SPOS; COMBINATORIAL CHEMISTRY; MONITORING SOLID PHASE REACTIONS; DETECTION OF REACTIVE GROUPS ON RESINS; IONIC LIQUIDS; FLUOROUS CHEMISTRY; BIBLIOGRAPHY; CHAPTER 4. PURIFICATION OF ORGANIC CHEMICALS
CHAPTER 5. PURIFICATION OF INORGANIC AND METALORGANIC CHEMICALS (Including Organic compounds of B, Bi, P, Se, Si, and ammonium and metal salts of organic acids)CHAPTER 6. PURIFICATION OF BIOCHEMICALS AND RELATED PRODUCTS; GENERAL SUBJECT INDEX; CAS REGISTRY NUMBERS INDEX

Sommario/riassunto

Now in its fifth edition, the book has been updated to include more detailed descriptions of new or more commonly used techniques since the last edition as well as remove those that are no longer used, procedures which have been developed recently, ionization constants (pKa values) and also more detail about the trivial names of compounds. In addition to having two general chapters on purification procedures, this book provides details of the physical properties and purification procedures, taken from literature, of a very extensive number of organic, inorganic and biochemical compounds
