1. Record Nr. UNINA9910583021403321 Autore Rudnik Ewa, dr. inz. **Titolo** Compostable polymer materials / / Ewa Rudnik Pubbl/distr/stampa Boston;; Amsterdam;; London,: Elsevier Science, 2008 **ISBN** 1-281-18934-0 9786611189341 0-08-056084-9 Edizione [1st ed.] Descrizione fisica 1 online resource (225 p.) Disciplina 668.49 Soggetti Biodegradable plastics Plastics - Biodegradation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Front Cover; Compostable Polymer Materials; Copyright Page; Contents; Nota di contenuto Preface: Symbols and abbreviations; Chapter 1. Introduction; 1.1 Situation in Europe: 1.2 Situation in the United States: 1.3 Situation in other regions of the world; References; Chapter 2. Compostable polymer materials - definitions, structures and methods of preparation; 2.1 Biodegradable polymers from renewable resources; 2.2 Other compostable polymers from renewable resources; 2.3 Biodegradable polymers from petrochemical sources; References; Chapter 3. Properties and applications 3.1 Biodegradable polymers from renewable resources 3.2 Biodegradable polymers from petrochemical sources; 3.3 Blends; 3.4 Summary; References; Chapter 4. Thermal and thermooxidative degradation; 4.1 Biodegradable polymers from renewable resources; 4.2 Biodegradable polymers from petrochemical sources; 4.3 Blends; 4.4 Summary of thermal stability of compostable polymer materials: References; Chapter 5. Composting methods and legislation; 5.1 Composting definitions; 5.2 Composting process and methods; 5.3 Composting of biodegradable polymers; 5.4 Labelling systems in different regions

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Sommario/riassunto

The book deals with an environmentally important family of polymers that is designed to be disposed of in industrial and municipal compost facilities after their useful life. These compostable plastics undergo degradation and leave no visible, distinguishable or toxic residue. Environmental concerns and legislative measures taken in different regions of the world make composting an increasingly attractive route for the disposal of redundant polymers. This book provides up-to-date results and information about compostable polymer materials in a coherent and comprehensive manner. It cov