

1. Record Nr.	UNINA9910829969603321
Titolo	Encyclopedia of polymer blends . Volume 2 Processing // edited by Avraam I. Isayev
Pubbl/distr/stampa	Weinheim, Germany : , : Wiley-VCH Verlag GmbH & Company KGaA, , [2011] ©2011
ISBN	3-527-80522-2 3-527-80521-4 3-527-80524-9
Descrizione fisica	1 online resource (425 p.)
Collana	Encyclopedia of Polymer Blends
Disciplina	668.9
Soggetti	Polymers Plastics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Encyclopedia of Polymer Blends; Contents; Preface; List of Contributors; 1: Polymer Blend Compounding and Processing; 1.1 Introduction and Early Studies of Blending; 1.2 Methods of Compounding; 1.2.1 Batch Mixers; 1.2.1.1 Introductory; 1.2.1.2 Non-intermeshing Rotor Mixers; 1.2.1.3 Intermeshing Rotor Mixers; 1.2.1.4 Post-World War II Development; 1.2.2 Continuous Mixers; 1.2.2.1 Early Activities; 1.2.2.2 Single-Screw Extrusion; 1.2.2.3 Co-rotating Twin-Screw Extrusion; 1.2.2.4 Tangential Counter-Rotating Twin-Screw Extrusion; 1.2.2.5 Modular Intermeshing Counter-Rotating Twin-Screw Mixer 1.2.2.6 Modular Buss Kokneter1.2.3 Comparisons; 1.3 Processing Polymer Blends; 1.3.1 Early Synthetic Polymer Blends; 1.3.2 General Ideas and Stability of Blend Phase Morphology; 1.3.3 Phase Morphology Variations in Processing Operations; 1.3.3.1 Melt Spinning; 1.3.3.2 Die Extrusion; 1.3.3.3 Injection Molding; References; 2: Rheology of Polymer Blends; 2.1 Introduction; 2.1.1 Rheological Models for Miscible Blends; 2.1.1.1 Solutions; 2.1.1.2 Homologous Polymer Blends; 2.1.2 Model Systems for Immiscible Blends; 2.1.2.1 Interphase and Percolation; 2.1.2.2 Suspensions; 2.1.2.3 Emulsion Rheology

2.1.2.4 Melt Flow of Block Copolymers
2.2 Theoretical Treatment of Polymer Blends; 2.3 Rheology of Miscible Blends; 2.3.1 General; 2.3.2 Phase Separation and Flow; 2.3.2.1 Influence of Thermodynamics on Rheology; 2.3.2.2 Influence of Rheology on Thermodynamics; 2.4 Rheology of Immiscible Blends; 2.4.1 Rheological Equations of State; 2.4.2 Morphology of Immiscible Blends; 2.4.3 Microrheology of Polymer Blends; 2.4.3.1 Deformation and Breakup of Viscoelastic Drops; 2.4.3.2 Coalescence of Viscoelastic Drops; 2.4.4 Flow Imposed Morphology; 2.4.5 Shear Flows
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3.3 Equipment for Blend Preparation by Melt Mixing of Polymers; 3.3.1 Batch Mixers; 3.3.1.1 Roll Mill; 3.3.1.2 Banbury or Kneader Mixer; 3.3.2 Continuous Mixers; 3.3.2.1 Twin-Screw Mixer; 3.3.2.2 Buss Continuous Kneader; 3.4 Preparation of Physical Blends of Plastics and Rubbers; 3.4.1 Laboratory Preparation of the Blends; 3.4.2 Production of Blends by a Batch Process; 3.4.3 Production of Blends by a Continuous Process in a Twin-Screw Mixer; 3.5 Crosslinking Agents and Crosslinking Processes; 3.6 Preparation of the Blends of Plastics and Crosslinked Rubbers
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