

1. Record Nr.	UNINA9910960286803321
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Titolo	Linear polyurethanes : synthesis methods, chemical structures, properties and applications / / by Piotr Krol
Pubbl/distr/stampa	Leiden ; ; Boston, : VSP, 2008 Leiden ; ; Boston : , : VSP, , 2008
ISBN	1-04-019455-9 0-429-08840-X 1-283-12665-6 9786613126658 90-04-18816-9 1-60119-611-3
Descrizione fisica	1 online resource (271 p.)
Disciplina	668.4/239
Soggetti	Polyurethanes
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 (p [241]-250) and index.
Nota di contenuto	Basic raw materials for the production of linear polyurethanes -- Reaction mechanisms occurring in the polyurethane production process -- General kinetic model for the diisocyanates and polyols polyaddition process -- Principal reactions utilised in the polyurethane technology -- Manufacturing methods for polyurethane elastomers -- Non-isocyanate methods for the synthesis of N-substituted linear polyurethanes -- Determination of molecular weights of linear polyurethanes by gelpermeation chromatography (GPC) and mass spectrometry (MS) methods -- Polyurethane ionomers -- Examples of copolymers with linear polyurethanes -- Microphase separation in polyurethane elastomers. Glass transition temperatures--analysis of phase structures by DSC, SAXS and AFM methods -- Intermolecular interactions free surface energy -- Thermal properties of linear polyurethanes -- Modern trends in property programming and in applications for linear polyurethanes.
Sommario/riassunto	This volume describes in detail the mechanisms of the diisocyanates and polyols polyaddition process as well as its kinetic and process

aspects important for obtaining linear polyurethanes. General kinetics of the process and its experimental verification, using GPC chromatography as well as NMR spectroscopy and MALDI-ToF spectrometry, are presented. Accompanied by over 400 references, the author presents synthesis methods, physicochemical properties of linear polyurethanes (analyzed with DCS, TG, DMTA, Rtg, AFM microscopy methods) as semiproducts for foams, elastomers, lacquers and coatings.
