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Titolo	Physical test methods for elastomers / / Roger Brown
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ISBN	3-319-66727-0
Descrizione fisica	1 online resource (xiv, 387 pages) : illustrations
Disciplina	620.11
Soggetti	Materials science Elastomers Materials - Testing Polymers Characterization and Evaluation of Materials Polymer Sciences Materials Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Section I: Before You Test -- Introduction -- General Considerations -- Standards -- Conditioning and Test Atmospheres -- Section II: Processing and Preparation for Test -- Processability -- Preparation of Test Pieces -- Mass, Density and Dimensions -- Section III: Short Term Mechanical Properties -- Stress and Strain Data -- Hardness -- Tension -- Compression -- Shear and Flexure -- Tear -- Section IV: Time Dependent Properties -- Dynamic Stress and strain -- Creep, Relaxation and Set -- Section V: Physical Properties -- Electrical Properties -- Thermal Properties -- Permeability -- Section VI: Durability -- Friction and Abrasion -- Fatigue -- Effect of temperature -- Effect of Environment -- Section VII: Interaction with Other Materials -- Adhesion -- Corrosion and Staining -- Index.
Sommario/riassunto	This book provides comprehensive coverage of all aspects of physical testing of elastomers (rubbers and thermoplastic elastomers) including mechanical, electrical, thermal and all aspects of durability. Elastomers are an important class of materials used in such products as tyres,

seals and hose which have markedly different properties to other materials. The importance of testing of elastomers means that a comprehensive text on the subject is essential. The advantage over general materials testing books is being more specific while the advantage over general rubber technology books is that testing is dealt with in depth. Provides an essential, comprehensive reference on the testing of elastomers; Treats testing methods and considerations more in-depth than most general rubber technology; Critical for the rubber industry, the industries using rubber products, and polymer research.