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Nota di contenuto	Front Cover; Compounding Precipitated Silica in Elastomers; Copyright Page; Table of Contents; Acknowledgements; Preface; Chapter 1. SILICA AS A REINFORCING FILLER; 1.1 Introduction; 1.2 Manufacture of Precipitated Silica; 1.3 Silica and Carbon Black; 1.4 Silica Surface Area; 1.5 Silica Free Water; 1.6 Silica Free Water, Affect on Visible Dispersion; 1.7 Silica Surface Silanol Groups; 1.8 Silica pH; 1.9 Soluble Salts in Silica; 1.10 Physical Form and Sensity of Silica; 1.11 Other Silica Properties; 1.12 Silane Treated Silicas; Chapter 2. COMPOUNDING PRECIPITATED SILICA IN NATURAL RUBBER 2.1 Introduction 2.2 Silica and Carbon Black 2.3 Activation: Zinc Oxide 2.4 Cure Activation: Glycols 2.5 Acceleration with Secondary Accelerators in Normal Sulfur Systems 2.6 Acceleration: Single Accelerators in Normal Sulfur Systems 2.7 Acceleration: Single Accelerators 2.8 Acceleration: Low Sulfur/Sulfur Donor Systems 2.9 Reversion 2.10 Antioxidant Systems

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#### Sommario/riassunto

This valuable guide to compounding elastomers with precipitated silica covers principles, properties, mixing, testing and formulations from a practical perspective. This handbook and reference manual will serve those who work on part design, elastomer formulation, manufacturing and applications of elastomers. Ample discussion of compound specifications adds to the usefulness of this book to practitioners. Comparisons of carbon black and silica compounds throughout the book allow readers to select the most suitable formulation for applications ranging from tires to electrical insulation to shoe

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