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Nota di contenuto	High Performance Pigments; Contents; Preface; List of Contributors; Part I; 1 Introduction to Inorganic High Performance Pigments; 1.1 Introduction; 1.2 Survey of Inorganic Pigments; 1.3 New Candidates on the Catwalk of Color; 1.4 Challenges for the Future; 2 Bismuth Vanadates; 2.1 Introduction; 2.2 Historical Background; 2.3 Manufacture; 2.4 Properties and Applications; 2.4.1 Chemical Properties; 2.4.2 Physical Properties; 2.4.3 Coloristic Properties; 2.4.4 Dispersibility; 2.4.5 Light Fastness and Weather Resistance; 2.4.6 Chemical and Solvent Resistance; 2.5 Applications; 2.5.1 Coatings 2.5.2 Plastics; 2.5.2.1 Properties; 2.5.2.2 Applications; 2.5.2.3 Conformity of Pigments for Plastics Coloration to Food and Drug Regulations; 2.6 Toxicology; 2.6.1 Acute Toxicity; 2.6.2 Chronic Toxicity; 2.7 Ecology; 3 Cadmium Pigments; 3.1 Introduction; 3.2 Pigment History; 3.2 Raw Materials; 3.2.1 Cadmium; 3.2.2 Selenium; 3.3 Chemistry of Cadmium, Selenium and Cadmium Sulfide; 3.3.1 Cadmium; 3.3.2 Selenium; 3.3.3 Substitution in the CdS Lattice; 3.4 Method of Pigment Manufacture; 3.4.1 General Points; 3.4.2 Cadmium Oxide Formation; 3.4.3 Cadmium Metal Dissolution; 3.4.4 Other Solution Making

3.4.5 Precipitation; 3.4.6 Filtration and Washing; 3.4.7 Drying; 3.4.8 Calcination; 3.4.9 Wet Milling; 3.4.10 Removal of Soluble Cadmium; 3.4.11 Final Drying and Milling; 3.5 Physical Properties; 3.6 Regulatory Issues; 3.7 Uses; 4 Cerium Pigments; 4.1 Introduction; 4.2 Rare Earth Sulfides and the Origins of their Color.; 4.3 Cerium Sulfide Pigment: Manufacture; 4.4 Properties and Applications; 4.4.1 Coloration of Plastics; 4.4.2 Paint and Coatings Application; 4.4.3 Miscellaneous Applications; 4.5 Toxicology and Environmental Aspects  
4.6 Toxicological and Environmental Concerns during the Manufacturing Process  
5 Complex Inorganic Color Pigments: An Overview.; 5.1 Introduction; 5.2 Structures of CICPs; 5.3 Production of CICPs; 5.4 Titanate Pigments; 5.4.1 Rutile Titanates; 5.4.2 Spinel Titanates; 5.4.3 Other Titanates; 5.5 Aluminate Pigments; 5.6 Cobalt Aluminates; 5.7 Cobalt Chromium Aluminates; 5.8 Chromites and Ferrites; 5.9 Black CICPs; 5.10 Brown Pigments; 5.11 Green Chromites; 6 Titanate Pigments: Colored Rutile, Pridelite, and Pseudobrookite Structured Pigments; 6.1 Introduction; 6.2 History  
6.2.1 Doped-Rutile (DR) Pigments  
6.2.2 Pridelite Pigments; 6.2.3 Pseudobrookite Pigments; 6.3 Synthesis; 6.3.1 DR Pigments; 6.3.2 Pridelite Pigments; 6.3.3 Pseudobrookite Pigments; 6.4 Applications; 6.5 Properties; 6.5.1 Spectral Properties; 6.5.1.1 Visible Spectral Characterization; 6.5.1.2 UV and NIR Spectral Characterization; 6.5.2 Physical Properties; 6.5.2.1 Particle Size Distribution; 6.5.2.2 X-ray Diffraction Characterization; 6.5.2.3 Specific Gravity; 6.5.2.4 Oil Absorption and Specific Surface Area; 6.5.2.5 Powder Flow and Dusting; 6.5.3 Chemical Properties; 6.5.3.1 pH Measurement  
6.5.3.2 Weathering

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#### Sommario/riassunto

High Performance Pigments have become increasingly important in recent years, with a growth rate well in advance of the more classical types of pigments. This book provides up-to-date information on the market for high performance pigments, synthesis, reaction mechanisms, physical and chemical properties, applications, regulatory affairs, toxicology and ecotoxicology. It is the only one on the market covering all high performance pigments in a single volume, offering both producers and users of High Performance Pigments the opportunity to review and update their understanding of latest tech

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