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Multi-functional Systems; 6.8 Pigments for Engineering Plastics; 6.9 The Effect of Pigments on Dimensions; 6.10 Colorants for Food and Medicals; 6.11 Recent Developments; 6.12 Market Trends; Chapter 7. Modifying Specific Properties: Appearance - Black and White Pigmentation; 7.1 Types of White Pigment; 7.2 Black Pigments 7.3 Commercial Trends: Titanium Dioxide 7.4 Commercial Trends: Carbon Black; Chapter 8. Modifying Specific Properties: Resistance to Heat - Heat Stabilizers; 8.1 How They Work; 8.2 Antioxidants; 8.3 Blends; 8.4 Replacement of Heavy Metals; 8.5 Effect of Silica on the Activity of Stabilizers; 8.6 Benzoxazolone Derivatives for PVC; 8.7 New Chemistry for Stabilizers; 8.8 Recent Developments; 8.9 Other Stabilizers; 8.10 Commercial Trends; Chapter 9. Modifying Specific Properties: Resistance to Light - UV Stabilizers; 9.1 How They Work; 9.2 UV Screening Pigments; 9.3 Absorbers 9.4 Energy Transfer Agents/Quenchers 9.5 Scavengers: Hindered Amine Light Stabilizers; 9.6 Synergists with HALS; 9.7 Polymeric Stabilizers; 9.8 Blends; 9.9 Replacement of Heavy Metals; 9.10 Selection of Antioxidants for Use with UV Stabilizers; 9.11 Concentrates, Masterbatches; 9.12 New Chemistry; 9.13 Recent Developments; Chapter 10. Modifying Specific Properties: Flammability - Flame Retardants; 10.1 How They Work; 10.2 Summary of FR additives; 10.3 Halogenated Compounds; 10.4 Other Flame Retardants; 10.5 Phosphorus; 10.6 Intumescent Flame Retardants; 10.7 Halogen-free Systems 10.8 Combinations of Flame Retardants

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Sommario/riassunto

Both technically and economically, additives form a large and increasingly significant part of the polymer industry, both plastics and elastomers. Since the first edition of this book was published, there have been wide-ranging developments, covering chemistry and formulation of new and more efficient additive systems and the safer use of additives, both by processors in the factory and, in the wider field, as they affect the general public. This new edition follows the successful formula of its predecessor, it provides a comprehensive view of all types of additives, concentrating m

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