

CONTENTS

DEVELOPMENT OF RUBBER-TOUGHENED PLASTICS

- | | |
|--|----|
| 1. Origin and Early Development of Rubber-Toughened Plastics | 3 |
| 2. Rubber-Toughened Styrene Polymers: A Review | 15 |

FRACTURE MECHANICS AND FAILURE MECHANISMS

- | | |
|--|-----|
| 3. Relationships Between the Microstructure and Fracture Behavior of Rubber-Toughened Thermosetting Polymers | 67 |
| 4. Matrix Ductility and Toughening of Epoxy Resins | 93 |
| 5. Fracture-Toughness Testing Materials | 119 |
| 6. Fracture of Elastomer-Modified Epoxy Polymers: A Review | 135 |
| 7. Thin Elastomer Films in Glassy Polymers | 173 |

MORPHOLOGY AND MECHANICAL PROPERTIES

- | | |
|---|-----|
| 8. Controlling Factors in the Rubber-Toughening of Unfilled Epoxy Networks: Application to Filled Systems | 193 |
| 9. Morphology of Rubber-Toughened Polycarbonate | 225 |
| 10. Morphology and Mechanical Properties of Rubber-Modified Epoxy Systems: Amino-Terminated Polysiloxane | 243 |
| 11. Phase-Separation and Transition Phenomena in Toughened Epoxies | 263 |
| 12. Optimum Rubber Particle Size in High-Impact Polystyrene: Further Considerations | 289 |

CHEMISTRY AND PHYSICS

- | | |
|---|-----|
| 13. Formation of Epoxy Networks, Including Reactive Elastomers | 303 |
| 14. Effect of Polydispersity on the Miscibility of Epoxy Monomers with Rubbers | 319 |
| 15. Stabilizer Partitioning in Rubber-Modified Systems | 329 |
| 16. Synthesis, Characterization, and Evaluation of Telechelic Acrylate Oligomers and Related Toughened Epoxy Networks | 343 |
| 17. Ethylene-Propylene Rubber Bulk Functionalization | 359 |

APPLICATIONS

- | | |
|---|-----|
| 18. Toughened Unsaturated Polyester Block Copolymers | 375 |
| 19. Mechanical and Fracture Properties: Elastomer-Modified Epoxy Model Adhesives Cured with an Accelerated Dicyandiamide System | 389 |
| 20. Polyblends of Polyvinyl Chloride with Ethylene-Vinyl Acetate Copolymers: Miscibility and practical Properties | 403 |
| 21. Blends of Unsaturated Polyesters with High-Molecular-Weight Elastomers Bearing Reactive FunctionalGroups | 415 |

INDEXES

Author Index	427
Affiliation Index	427
Subject Index	427