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Note generali	Includes index.
Nota di contenuto	Section A. Fundamentals -- 1. Introduction to Adhesives -- 2. The Role of Adhesives in the Economy -- 3. Fundamentals of Adhesion -- 4. Surface Preparation for Adhesive Bonding -- 5. Adhesive Selection and Screening Testing -- Section B. Adhesive Materials -- 6. Animal Glue -- 7. Casein and Mixed Protein Adhesives -- 8. Starch Based Adhesives -- 9. Natural Rubber Adhesives -- 10. Butyl Rubber and Polyisobutylene -- 11. Nitrile Rubber Adhesives -- 12. Styrene Butadiene Rubber Adhesives -- 13. Thermoplastic Rubber (A-B-A Block Copolymers) in Adhesives -- 14. Carboxylic Polymers in Adhesives -- 15. Neoprene (Polychloroprene)-Based Solvent and Latex Adhesives -- 16. Poly sulfide Sealants and Adhesives -- 17. Phenolic Resin Adhesives -- 18. Amino Resin Adhesives -- 19. Epoxy Resin Adhesives -- 20. Polyurethane- and Isocyanate-Based Adhesives -- 21. Polyvinyl Acetate Emulsions for Adhesives -- 22. Polyvinyl Alcohol for Adhesives -- 23. Polyolefin and Ethylene Copolymer-based Hot Melt Adhesives -- 24. Polyvinyl Acetal Adhesives -- 25. Acrylic Adhesives -- 26. Anaerobic Adhesives -- 27. Cyanoacrylate Adhesives -- 28. Polyester and Polyamide High Performance Hot Melt Adhesives -- 29. High Temperature Organic Adhesives -- 30. Silicone Adhesive Sealants and Adhesives -- 31. Organofunctional Silane Coupling Agents -- 32. Non-Silane Coupling Agents -- 33. Resins for Elastomer-Based Adhesives --

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Sommario/riassunto

Adhesives are indispensable. They are required pling agents, and other key ingredients. Special in myriad products-aircraft and abrasives, cars attention is given to such flourishing categories and cartons, shoes and safety glass, tape and as acrylics, anaerobics, cyanoacrylates, polyurethanes, epoxy resins, polyvinyl acetate, high tires. This Third Edition of Handbook of Ad- hesives, like the 1962 and 1977 editions, seeks temperature adhesives, hot melts, silicones, and to provide the knowledge needed for optimum silanes. selection, preparation, and utilization of adhe- The last 14 chapters, on adherends and bond- sives and sealants. The information is detailed ing technology, involve the auto industry, air- and explicit, with several hundred illustrative craft, electronics, the bonding of wood, formulations. textiles, rubber and plastics, construction, ab- Expert information has been supplied in 47 rasives, pressure-sensitives, nonwovens, and chapters written by 70 industry specialists, pro- sealants. Mechanical handling of two-compo- fessors, and consultants. Five chapters on fun- nent systems is examined. The concluding damentals provide the theoretical and economic chapter highlights the exciting progress that is underpinnings-why adhesives work, how they being made in the use of robotics to apply ad- are selected, how the surface is prepared, how hesives, techniques already far advanced in au- they are applied, how they are set, how the tomotive assembly. cured joint is tested.
