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3.3.4 Glass Transition Temperature3.3.5 Creep; 4 Important Reactive Adhesives; 4.1 Epoxy Resin Adhesives; 4.1.1 Two Component Epoxy Resin Adhesives; 4.1.2 One-Component Epoxy Resin Adhesives; 4.1.3 Reactive Epoxy Resin Hot-Melt Adhesives; 4.1.4 Properties and Application of Epoxy Resin Adhesives; 4.2 Polyurethane (PUR) Adhesives; 4.2.1 Two-Component Polyurethane Adhesives (Solvent-Free); 4.2.2 One-Component Polyurethane Adhesives (Solvent-Free); 4.2.3 Reactive Polyurethane Hot-Melt Adhesives (Solvent-Free); 4.2.4 One-Component Polyurethane Solvent-Based Adhesives

4.2.5 Two-Component Polyurethane Solvent-Based Adhesives4.2.6 Polyurethane Dispersion Adhesives; 4.3 Acrylic Adhesives; 4.3.1 Cyanoacrylate Adhesives; 4.3.2 Radiation-Curing Adhesives; 4.3.3 Methacrylate Adhesives; 4.3.4 Anaerobic Adhesives; 4.4 Unsaturated Polyester Resins (UP-Resins); 4.5 Phenolic Adhesives; 4.6 Silicones; 4.7 Summary Reactive Adhesives; 4.8 Film Adhesives; 4.9 Sealing Materials; 4.10 Polymer Mortars; 5 Physically Setting Adhesives; 5.1 Hot-Melt Adhesives; 5.2 Solvent-Based Adhesives; 5.3 Contact Adhesives; 5.4 Dispersion Adhesives; 5.5 Plastisols

5.6 Pressure-Sensitive Adhesives, Adhesive Tapes5.7 Adhesive Strips; 5.8 Glue Sticks; 5.9 Adhesives Based on Natural Raw Materials; 5.10 Adhesives on an Inorganic Basis; 6 Adhesive Forces in Bonded Joints; 6.1 Adhesive Forces Between Adhesive Layer and Adherend (Adhesion); 6.2 Wetting; 6.3 Surface Tension; 6.4 Adhesive Forces Inside an Adhesive Layer (Cohesion); 7 Production of Bonded Joints; 7.1 Surface Treatment; 7.1.1 Surface Preparation; 7.1.1.1 Cleaning; 7.1.1.2 Adjusting; 7.1.1.3 Degreasing; 7.1.1.4 Degreasing Agents; 7.1.2 Surface Pretreatment; 7.1.2.1 Mechanical Surface Pretreatment

7.1.2.2 Physical and Chemical Surface Pretreatment

Sommario/riassunto

This manual provides the most important information on successful bonding. Various practical advices and helpful tips are useful for the handling of adhesives. Due to its didactically structured content, the book may also serve as a medium for training courses in bonding engineering. The basics of this innovative joining procedure are described in a practical and easily understandable way suitable for the application in trade and industry.