

CONTENTS AND SUBJECT INDEX

| | | |
|--|--|-----|
| INTRODUCTION | | 1 |
| 1. METAL TO METAL BONDING | | 2 |
| Epoxy | | 2 |
| Crystalline 2,2-Bis(2,3-Epoxypropoxyphenyl)Propane | | 2 |
| Epoxy Esters of Polycarboxylic Aromatic Acids | | 4 |
| Poly[4-(4-Cyclohexylmethyl)Cyclohexyl Sebacamidol | | 6 |
| Linear Polyamides, Epoxy Resin | | 8 |
| Polyamide Resin with Phenolic Flux | | 11 |
| Polyamide Curing Agent, Reaction Product of Alkylated Phenol and a Polyamine | | 13 |
| Sulfanilamide, Dicyandiamide Curative System | | 14 |
| Aziridinyl Curing Agents, Sulfamic Acid Catalyst | | 16 |
| Pyromellitic Dianhydride Curing Agent, High Temperature Systems | | 21 |
| Sulfone, Epoxy Siloxane Monomer as Reactive Solvent | | 22 |
| Polyaminodiphenylsulfones, High Temperature Adhesive | | 25 |
| Use of Phenolic Ketones in High Temperature Adhesives | | 27 |
| Polyisophthalamides for Metallic Containers | | 30 |
| Polyester, Phenoxy Adhesive for Metallic Containers | | 32 |
| Carboxylated Vinyl Polymers, Epoxidized Soybean Oil | | 38 |
| Epoxy Novolak, Zinc Chromate for Seawater Resistance | | 42 |
| Epoxyalkanoic Acid Primer, Uranium Metal | | 44 |
| Joining of Metal Stampings | | 44 |
| Irrigation Pipe, Tubular Metallic Foil | | 48 |
| Thermoplastic Polyhydroxyethers | | 51 |
| Urethane | | 55 |
| Polyester-Urethane for Metallic Containers | | 55 |
| Epoxy Silane Addition to Improve Water Resistance | | 57 |
| Polyurethane Resin Blended with Monomeric Glycidyl Ester | | 58 |
| Epoxy Modified, Lead Naphthenate Catalyst | | 60 |
| 2. FIBER TO RUBBER BONDING FOR TIRE CORD | | 63 |
| Epoxy | | 63 |
| Epoxy Novolak, Polyamide Resin | | 63 |
| Epoxy Novolak, Polypeptide, Vinyl Pyridine-Containing Terpolymer | | 67 |
| 2-Pyrrolidone, Polyepoxide, RFL Dip | | 72 |
| Polyepoxide Followed by RFL Dip | | 75 |
| Polyepoxide, Caprolactam, RFL Dip | | 79 |
| Polyepoxide, Urethane, RFL Dip | | 82 |
| Two-Step Treatment Using Curable Epoxy and RFL | | 85 |
| Glycidyl Methacrylate-Butadiene Copolymer, RFL | | 88 |
| Polyester-Butyl Adhesion | | 90 |
| Alkenyl Epoxy-Diene Copolymers | | 92 |
| Epoxidized α -Olefin/Nonconjugated Diene Copolymers | | 98 |
| Epoxidized Rubber Compositions, Wire Reinforcement | | 103 |

Contents and Subject Index

| | |
|---|------------|
| Urethane, Isocyanate | 107 |
| RFL Blocked Polyisocyanate | 107 |
| Phenol Blocked Isocyanate, Polymeric Modified Triisocyanate | 111 |
| Methylolated Blocked Polyisocyanate, RFL Dip | 114 |
| Unsaturated Polyester-Polyurethane | 119 |
| Polyisocyanate Modified Resorcinol-Formaldehyde Resins | 124 |
| Monoisocyanate Condensed Resorcinol-Aldehyde Resins | 125 |
| Sulfochlorinated, Maleic Modified, Olefin Copolymers | 127 |
| Filled Polyalkaleneether-Polyurethane Elastomer | 132 |
| Methylene Bis(4-Phenylisocyanate) Primer | 134 |
| 3. GLASS AND CERAMIC ADHESIVES | 138 |
| Epoxy, Glass-Filled Laminates | 138 |
| Polyepoxy Ethers of Polyhydric Phenols | 138 |
| Reaction with Aniline-Formaldehyde Resins | 139 |
| Phenol-Formaldehyde, Epoxy, Phenyl Silicone Condensates | 141 |
| Piperidine, Titanate Catalysts | 142 |
| Epoxy, Aminoalkyl Trialkoxysilane | 143 |
| Thermoset Binders, Amino, Epoxy Triethoxy Silanes | 146 |
| Silane Modified Thermoplastic Resins | 149 |
| Epoxy, Ceramics, Glass to Metal | 154 |
| Amino Silane Addition, Glass Container Bonding | 154 |
| Triglycidyl Isocyanurate, Alkali Metal Silicates | 156 |
| Cementitious Mortar | 157 |
| Thixotropic, Nonflowing Adhesive for Ceramic Tiles | 160 |
| Epoxy Grout Composition, Molecular Sieve Catalyst Carrier | 164 |
| Titanium Dioxide Filled Epoxy System, Metal-Glass Adhesion | 166 |
| Polysulfide, Metal-Glass Adhesion | 170 |
| Urethane | 172 |
| Diisocyanate-Unsaturated Diol Reaction Products, Filled Laminates | 172 |
| Ethylene/Vinyl Acetate Copolymers, Safety Glass Laminates | 173 |
| Safety Glass Manufacture | 175 |
| 4. POLYMER TO POLYMER BONDING | 182 |
| Epoxy | 182 |
| Epoxy-Carboxylated Acrylic, Polytrifluorocarbon Bonding | 182 |
| Nylon Particle Filled Systems | 183 |
| Bonding of Epoxide Putty to Polyethylene | 184 |
| Flame Treatment of Polystyrene | 187 |
| Polyepoxides-Dimer Fatty Acid Products, Mylar to Polyethylene | 188 |
| Lamination of Textile Fabrics to Urethane Polymers | 190 |
| Urethane and Isocyanate | 192 |
| Blends with Elastomers and Polyvinyl Chloride for Fabric Coating | 192 |
| Polycarbonate Resin Bonding to Cellulose Ester | 193 |
| Piperazine Polyurethane for Polyester Film Splicing | 195 |
| Silicone-Organic Elastomer Binding | 197 |
| Alkyl Benzene Diisocyanate Rubber Adhesives | 198 |
| 5. PLASTIC TO METAL BONDING | 201 |
| Epoxy | 201 |
| Polyvinyl Fluoride Lamination - Aqueous Emulsion | 201 |
| Polyamide Bonding | 207 |
| Silicone Rubber | 209 |
| Epoxy, Aromatic Nitroso Compounds, Elastomer Bonding | 209 |
| Urethane and Isocyanate | 212 |
| Chlorosulfonated Polyethylene for Elastomer Bonding | 212 |
| Chlorosulfonated Polyolefins, Polyisocyanate, EPDM Bonding | 213 |
| Chlorinated Acrylonitrile, Benzidine Diisocyanate Primers | 215 |
| Thermoplastic Polyvinyl Chloride for Urethane Bonding | 216 |
| Polyesteramide-Diisocyanate Reaction Product, Laminated Foam | 218 |

| | |
|---|------------|
| 6. PAPER AND WOOD ADHESIVES | 220 |
| Epoxy | 220 |
| Polyethylene, Rosin, Polyamide-Epoxy, Cardboard Adhesives | 220 |
| Polymerizable Oxirane Triazine Compounds | 224 |
| Methyl Methacrylate/Methacrylic Acid Copolymers with Diepoxides and PVF Laminates | 226 |
| Neoprene, Terpene-Phenolic, Phenol-Formaldehyde | 229 |
| Polyvinyl Chloride Adhesion to Masonite | 231 |
| Stainless Steel Laminate | 234 |
| Epoxyated Novolak, Plywood Containers | 235 |
| Wood Surfaced Floor Covering | 241 |
| Adhesive Bonding, Wood Treatment | 243 |
| Urethane | 245 |
| Terpene-Containing Urethane, Hot Melt Paper Adhesive | 245 |
| 7. MISCELLANEOUS APPLICATIONS OF GENERAL PURPOSE ADHESIVES | 249 |
| Epoxy | 249 |
| Aminoamides of Polymeric Fatty Acids as Curing Agents | 249 |
| C ₁ to C ₄ Alkylureas as Latent Curing Agents | 250 |
| Blends with Acrylonitrile Butadiene-Styrene Graft Copolymers | 253 |
| Cyanoacrylate Adhesives | 257 |
| Water Activated Epoxy Compositions | 259 |
| Low Viscosity Polyepoxides | 260 |
| Amino-Organosilicon Compounds, Reaction Products with Adhesives | 262 |
| Internal Sealing of Gas Main Joints | 268 |
| Pipe Adhesive | 269 |
| Urethane | 272 |
| Nitropolyurethane Compositions for Solid Propellant Binders | 272 |
| COMPANY INDEX | 276 |
| INVENTOR INDEX | 277 |
| U.S. PATENT NUMBER INDEX | 279 |