



UV-Curable Epoxy Provides Chemical-Resistant Bonds



A combination of superior physical strength and cure rates faster than those of competing epoxy adhesives makes Master Bond UV16 suitable for demanding bonding, sealing, and coating applications. The standard formulation has a viscosity of 200–400 cP, and a higher-viscosity version (UV16TK) is also available. A reactive epoxy, UV16 is uninhibited by oxygen, and does not release any solvents or volatiles during curing. It adheres well to a wide array of substrates, including many plastics, metals, and glass. It will cure with thicknesses up to 0.125 in., and its 2–3% shrinkage rate is lower than that of most free-radical UV adhesives. Once cured, its tensile strength exceeds 4,100 psi and its Shore D hardness is over 75. Post-curing UV16 to 125°F for 30 minutes gives the adhesive a glass transition temperature of 135°F and enhanced chemical resistance, especially against acids and solvents.

Master Bond

www.masterbond.com

Antimicrobial Agent Provides In-Can Preservation

A new antimicrobial active ingredient, MBIT (2-Methyl-1,2-benzisothiazol-3(2H)-one), enables Biobantm 551S to eliminate microbial contamination and control the growth of organisms in cans of products such as latex or aqueous coatings and paints. Formulations based on MBIT provide protection

against a broad spectrum of organisms, including hard-to-control strains of bacteria, yeast, mold, and others, and are effective at very low dosages across a broad pH range. Biobantm 551S is a water-based and solvent-free solution, does not release formaldehyde, and its active ingredients do not contain added organohalogens or heavy metals, so it meets major eco-labeling requirements.

Dow Microbial Control

www.dow.com

Barrier Film is Suitable for Pharmaceutical Packaging

The Aclar UltRx 6000 film protects sensitive medicines from moisture in hot and humid climates, allowing pharmaceutical producers to standardize their product packaging with a single packaging film that will work in all regions of the world. This clear film can also help reduce drug package sizes by up to 55% compared with traditional cold-formed foil. Aclar UltRx 6000 is a 6-mil, 152-mm thermoformable film that is biochemically inert, chemical resistant, nonflammable, and plasticizer- and stabilizer-free, and it provides extremely low moisture vapor transmission rates.



Honeywell

www.honeywell.com

Rubber Grades Offer Flame Retardancy without Abrasion

Previous liquid silicone rubbers owed their flame retardancy to inert fillers such as quartz, which caused abrasion during the injection molding process.

In contrast, Elastosil LR 3011/50 FR and Elastosil LR 3170/40 are formulated with inert fillers that contain no abrasive additives. Because they exhibit considerably less abrasive behavior during injection molding, maintenance needs are reduced and the useful life of the mold is extended. The self-adhesive Elastosil LR 3170/40 is designed for two-component injection-molded products, as the liquid silicone rubber begins bonding with hard components (but not to the surface of the injection mold) during the vulcanization process. Both grades have received the best flammability rating (V-0) available under the Underwriters Laboratories Standard UL 94.

Wacker Chemie AG

www.wacker.com

High-Purity Meso-Lactide Eases Processing Requirements

The Ingeo lactide and biopolymer product line has been extended with the addition of a high-purity, polymer-grade lactide rich in the stereoisomer meso-lactide. Ingeo M700 lactide can be used as an intermediate for copolymers, amorphous oligomers and polymers, grafted substrates, resin additives and modifiers, adhesives, coatings, elastomers, surfactants, thermosets, and solvents. Ingeo M700 is said to be a lower-cost alternative to high-priced racemic lactides and L- and D-lactides for a host of industrial applications. Unlike racemic lactide's melting point of nearly 130°C, and L- and D-lactide's melting point of 97°C, Ingeo M700's melting point is below 60°C, which simplifies processing requirements. In addition, because Ingeo M700 is essentially an anhydrous form of lactic acid, processors will not have to deal with water when using it.

NatureWorks LLC

www.natureworkslc.com