Medical & Dental Adhesives & Sealants


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US demand to grow 7.6% annually through 2011

Demand for medical and dental adhesives and sealants in the US is forecast to rise 7.6 percent per year to $1.8 billion in 2011. Much of this growth can be attributed to the aging US population, as older individuals are more likely to require surgical and dental procedures. Advances will also depend on continuing new product development and increasing acceptance of these materials in surgical and consumer settings.

Cyanoacrylate, polyethylene glycol among best prospects

With the exception of joint replacements and most dental applications, medical applications for adhesives and sealants are relatively new, and thus many markets are experiencing fast growth off a small base. Cyanoacrylate adhesives are projected to find greater use in external tissue bonding applications, particularly in medical emergency and consumer settings. In addition, rapid gains should result from the commercialization of several products presently in development, including cyanoacrylates for internal applications. Continued market penetration of polyethylene glycol sealants in tissue bonding and sealing applications during cardiovascular surgical procedures, as well as the development of an expanded application base into abdominal and cranial procedures, will provide rapid growth for these materials. Rapid gains for plasma and protein sealants, including those based on albumin and collagen, will be promoted by their expanded use in surgical procedures such as tissue sealing.

Medical applications to outpace dental uses

Due to the aforementioned factors, medical applications will achieve more rapid growth than dental applications through 2011. In internal medical applications, adhesives and sealants will experience the best growth in situations where the tissue involved is affected by pressure caused by blood (e.g., capillaries, veins or arteries), air (e.g., the lungs), solids (e.g., the gastrointestinal system) or fluids (e.g., the dural membrane in the cranial region, the bladder or the spinal cord). In external medical applications, adhesives and sealants will find increased opportunities in external tissue bonding, particularly on low tension wounds.

Dental applications will post annual growth of 4.1 percent through 2011. However, good opportunities still exist, especially in newer products. For example, pit and fissure sealants will register strong gains due to their use in the prevention of cavities. Products such as denture adhesives, restorative adhesives and luting cements will see limited gains through 2011, primarily due to overall improved dental health.
Dental Applications

Consumption of adhesives and sealants in dental applications is forecast to rise 4.1 percent per year to $685 million in 2011. Gains will be limited by a lower incidence of tooth decay and tooth loss from the fluoridation of water and aggressive education efforts on the benefits of brushing and flossing. However, there will be strict gains for restorative and preventive products, including adhesives and fissure sealants. In dental applications, adhesives and sealants generally do not compete with other technologies. This is in contrast with other applications where adhesives and sealants compete with bandages, sutures or staples. In 2011, dental applications are projected to account for 39 percent of the total medical and dental adhesives and sealants market.

There are seven major categories of dental adhesives and sealants: denture bonding agents, pit and fissure sealants, restorative adhesives, cements, orthodontic bonding agents, luting cements, tray adhesives and surgical tissue bonding. Adhesives and sealants are projected to achieve the most rapid gains in tissue bonding as more dental professionals realize the benefits of using these materials in various surgical procedures, such as tooth extractions. Pit and fissure sealants will also register above-average gains due to their use in the prevention of cavities. Products such as denture adhesives, restorative adhesives and luting cements will see limited gains through 2011, primarily due to overall improved dental health in the US population.

Several technologies can be used in the production of dental adhesives and sealants, including bisphenol-A-glycidyl methacrylate (BIS-GMA), glass ionomer, hybrid glass ionomers, methacrylate, polycarboxylate, silicone, sodium carboxymethyl cellulose, urethane acrylate, zinc phosphate, zinc oxide-eugenol and a copolymer of methyl vinyl ether...
Sample Profile, Table & Chart

### COMPANY PROFILES

**Prestige Brands Holdings Incorporated**

90 North Broadway
Irvington, NY 10533
914-524-6810
http://www.prestigebrands.com

**Revenues:** $289 million (FY 2006)

**Employment:** 87 (FY 2006)

**Key Products:**
- A liquid bandage

Prestige Brands, a portfolio company of private equity firm GTCR Golder Rauner LLC (Chicago, Illinois), is engaged in the marketing, sale and distribution of over-the-counter pharmaceuticals, household cleaning and personal care products sold by mass merchandisers. The Company operates through three segments: Over-the-Counter Drug, Household Cleaning and Personal Care.

The Company participates in the medical adhesive and sealant industry through the Over-the-Counter Drug segment, which generated FY 2006 sales of $161 million. Among the segment’s products are NEW-SKIN liquid bandages, which are brushed on skin and dry rapidly to form a clear protective cover that also kills germs via an antiseptic. The Company identifies the major competitor of their NEW-SKIN products as Johnson & Johnson (New Brunswick, New Jersey), maker of BANDAID liquid bandage. The segment uses various third-party manufacturers to fulfill all of its manufacturing needs. These manufacturers also handle production planning, research and development, procurement and quality testing. Principal customers of the Company’s products include Wal-Mart (Bentonville, Arizona), Walgreens (Deerfield, Illinois), CVS (Woonsocket, Rhode Island), Target (Minneapolis, Minnesota) and Dollar General (Goodlettsville, Tennessee).

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**SAMPLE TABLE**

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### CHART VI-1

**Medical & Dental Adhesives & Sealants Sales by Company, 2006**

($1.2 billion)

**SAMPLE CHART**
Order Information

Five Convenient Ways to Order

ONLINE: www.freedoniagroup.com
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FAX: +1 440.646.0484 (US)
EMAIL: info@freedoniagroup.com

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- Chemicals • Plastics • Life Sciences • Packaging • Building Materials • Security & Electronics • Industrial Components & Equipment • Automotive & Transportation Equipment • Household Goods • Energy/Power Equipment

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