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Automotive Coatings, Adhesives & Sealants

US Industry Study with Forecasts for **2012 & 2017**

Study #2317 | May 2008 | \$4500 | 296 pages

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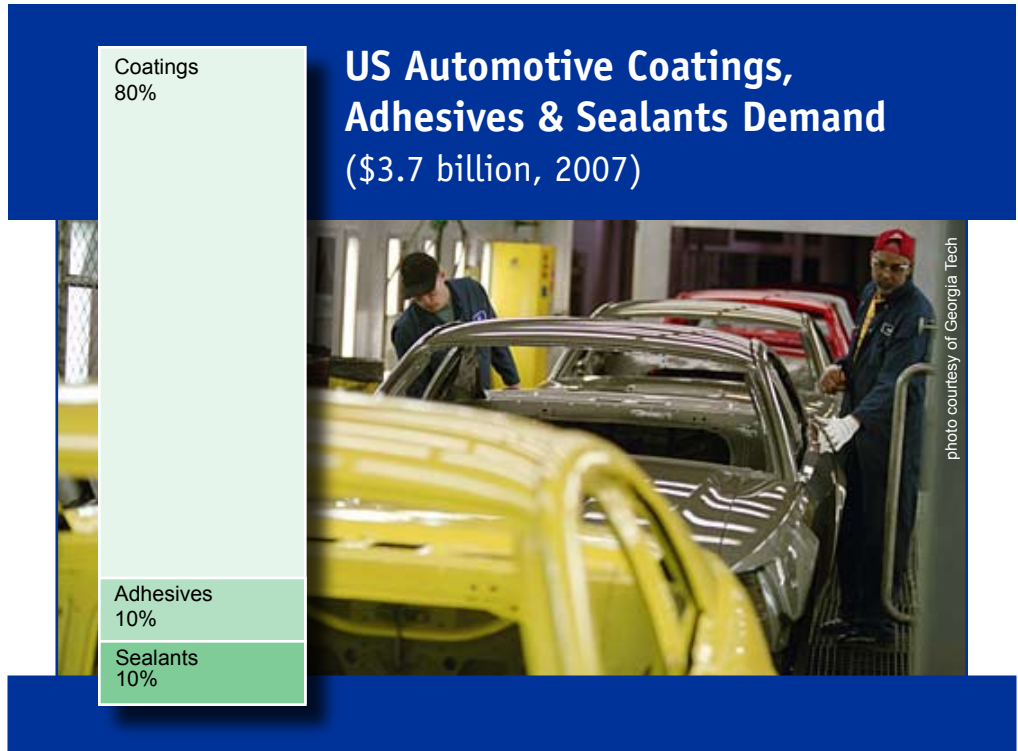
Although gains in the dominant coatings segment will be slow, adhesives will benefit from their increasing use in vehicle assembly, and sealants from their use in reducing noise and vibration.

Overall demand in US to reach \$5.3 billion in 2012

US demand for automotive coatings, adhesives and sealants is expected to increase 2.6 percent annually to \$5.3 billion in 2012, with volume reaching 1.6 billion pounds. Coatings will continue to dominate the market, accounting for nearly 80 percent of market value. Slow gains in this segment will offset the more rapid advances seen in the smaller volume adhesive and sealant markets. An improving outlook for motor vehicle production will support volume gains, as will the increasing importance of structural adhesives in vehicle assembly.

Design trends favoring adhesives, sealants

Automotive design trends favoring enhanced fuel efficiency through vehicle weight reduction will increase the utilization of plastics in motor vehicle manufacture. Adhesives will benefit from this shift, as they are lower in cost and better-suited for use with plastics than mechanical fasteners. New high-strength adhesives also provide improved crash resistance. Similarly, liquid gaskets will increasingly be employed at the expense of mechanical gaskets, as these sealants can provide significant cost savings, as well as resistance to corrosion and a variety of chemicals. Liquid gaskets' ability to reduce noise and vibration will provide further opportunities.



OEM market to rebound, aftermarket to benefit from larger vehicles in use

The original equipment manufacturer (OEM) market for coatings, adhesives and sealants is heavily dependent on motor vehicle production patterns. Through 2012, motor vehicle production is expected to rebound from the poor performance experienced during the 2002-2007 period, spurring demand in the OEM market. Passenger cars will achieve the greatest turnaround, but this offers a mixed blessing for materials suppliers as these vehicles consume less coating, adhesive and sealant on a per vehicle basis than do larger vehicles. Rapid growth in the production of

medium and heavy vehicles will also contribute to advances. Aftermarket demand will benefit from continued growth in the motor vehicle park, as well as the popularity of light trucks, vans and sport utility vehicles over the past decade. Despite below average gains in the production of these larger light vehicles due to high fuel prices and market saturation, these vehicles -- which consume higher volumes of coatings, adhesives and sealants in their repair than do smaller light vehicles -- will maintain a significant share of the motor vehicle park. Providing further aftermarket support will be above average increases in the number of medium and heavy vehicles in use.

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Sample Text, Table & Chart

AUTOMOTIVE COATINGS

Urethane

Demand for urethane-based automotive coatings is forecast to expand 2.3 percent per year through 2017, matching the growth of the coatings market overall. Urethane coatings represent the largest segment of the automotive coatings market, accounting for more than half of demand in 2007. Volatility in the automotive industry experienced during the 2002-2003 downturn has led to a decline in urethane usage in powder coatings, but demand is expected to rebound through 2017 as growth in the automotive market from urethane usage in powder coatings is offset by growth in plastic coatings. In addition, efforts to reduce VOC emissions inside vehicles will promote use of water-based polyurethane coatings.

Urethane-based automotive coatings are used at both the OEM and aftermarket levels, with the majority of demand coming from the OEM market. The coatings are primarily utilized in applications requiring high gloss or smooth textures. In exterior applications at the aftermarket level, urethane polymers are generally used in solvent-based formulations. At the OEM level, urethane polymers are used in a variety of formulations including solvent-based, water-based and powder. Polyurethane coatings can be applied to a variety of substrates, including metal and plastic. Interior applications include the coating of steering wheels, instrument panels, air bag covers, consoles and glove box doors. Exterior applications include full car bodies, plastic body panels, cladding, fascia and bumpers, wheel covers and mirror housings.

Urethane coatings are typically available in one- and two-component formulations, with the latter forecast to see the better opportunities. One component polyurethane coatings consist of blocked polyisocyanates. Use on plastics is limited due to the high temperatures required during curing. Two component polyurethane coatings consist of hydroxyl functional polymers, pigments and additives that are combined with a group of polyisocyanate crosslinkers or hardeners. Two component

SAMPLE TEXT

TABLE V-10

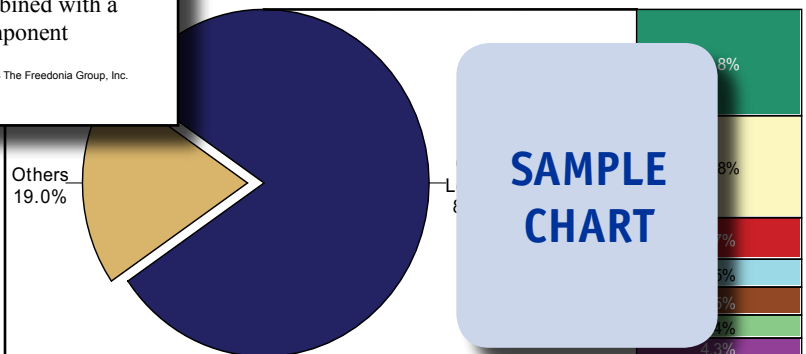
LIGHT VEHICLE OEM ADHESIVE DEMAND BY VEHICLE (million dollars)

Item	1997	2002	2007	2012	2017
Light Vehicle Production (000 units)	117	117	117	117	117
\$ OEM adhesives/vehicle	2	2	2	2	2
Light Vehicle OEM Adhesive Demand	234	234	234	234	234
Passenger Cars	195	195	195	195	195
Light Trucks & Vans	39	39	39	39	39
% light vehicle	9	9	9	9	9
Automotive OEM Adhesive Demand	234	234	234	234	234

SAMPLE TABLE

CHART IX-1

AUTOMOTIVE COATINGS, ADHESIVES & SEALANTS MARKET SHARE BY COMPANY, 2007 (\$4.6 billion)



SAMPLE CHART

Sample Profile, Table & Forecast

COMPANY PROFILES

Dow Corning Corporation

2200 West Salzburg Road
 Midland, MI 48686
 989-496-4000
 http://www.dowcorning.com

Sales: \$1.2 billion (2007)
 Employment: 1,000 (company)
 Key Products: automotive sealants

Dow Corning Corporation is a Corning Incorporated (Corning Company) (Midland, Michigan) and markets polymers and coatings in the automotive industry. Dow Corning's products are designed to release, defoam, insulate, waterproof, lubricate, seal, coat and protect.

The Company's products for automotive applications include MOLYKOTE anti-friction coatings that can be used on such substrates as metals, elastomers and engineered polymers. MOLYKOTE anti-friction coatings are suitable for use on a number of interior and exterior automotive parts and are designed to reduce squeaking and rattling. The Company also produces automotive sealants for powertrain cases, sideview mirrors and valves. These sealants, which are sold under the SEALASTIC brand name, are engineered to provide resistance to mineral and other types of oil. The Company also produces adhesives and sealants under the DOW CORNING brand name. These adhesives and sealants include silicone glazing, thermally conductive and industrial types that are used in the automotive industry, among others.

In the US, Dow Corning operates manufacturing facilities in Kendallville, Indiana; Freedland, Hemlock, Midland and Plymouth,

**SAMPLE
 PROFILE**

TABLE VI-8

AUTOMOTIVE SEALANT DEMAND BY MARKET & APPLICATION (million dollars)

Item	1997	2002	2007	2012	2017
Motor Vehicle Production (000 units) 12					50
\$ OEM sealants/vehicle					3
Motor Vehicles in Use (mil units)					3
\$ aftermarket sealants/vehicle					2
Automotive Sealant Demand					0
By Market:					
OEM					0
Aftermarket					0
By Application:					
Exterior					0
Interior					5
Other					45

**SAMPLE
 TABLE**

"Demand for automotive coatings, adhesives and sealants at the original equipment manufacturer level is forecast to increase 2.2 percent per year to \$3 billion in 2012, attributable to increased motor vehicle production, which is expected to rise 1.3 percent per year to 11.6 million units over the same time period. Growing demand on a per vehicle basis reflects expanding applications for adhesives and sealants in motor vehicle assembly, partially in response to increased use of plastics and weight reduction and fuel efficiency programs initiated by automakers. As a result, overall growth in demand will ..."

--Section VIII, pg. 176

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OTHER STUDIES

Solvents

This study analyzes the 12.5 billion pound US solvents industry. It presents historical demand data for 1997, 2002 and 2007 and forecasts for 2012 and 2017 by type (e.g., alcohols, ethers, hydrocarbons, ketones, esters, chlorinated solvents, propylene glycol, butanediol, soy oil, terpenes, hydrogen peroxide), by function (e.g., vehicle/carrier/thinner, antifreeze and deicers, cleaners, extraction agents) and by market. The study also considers market environment factors, evaluates company market share and profiles 35 leading industry players.

#2357 06/2008..... \$4600

World Architectural Paints

Global demand for architectural paints will grow 3.9% annually through 2011. Gains will be paced by developing Asia/Pacific countries, especially China and India. Water-based paints will continue to supplant solvent-based types to claim 73% of demand. This study analyzes the 17.8 million metric ton world architectural paint industry, with forecasts for 2011 and 2016 by formulation, market, end user, world region and for 23 major countries. It also evaluates company market share and profiles major players.

#2311 02/2008..... \$5600

World Flame Retardants

World flame retardant demand will grow 4.7% per year through 2011. Gains in developing countries will be driven by more stringent flammability regulations and the use of more plastics. More mature markets will experience an acceleration in demand due to an upswing in manufacturing. This study analyzes the \$3.6 billion world flame retardant industry, with forecasts for 2011 and 2016 by product, market, world region and 17 countries. It also details company market share and profiles major players.

#2277 12/2007..... \$5400

Wood Protection Coatings & Preservatives

US demand for wood protection coatings and preservatives will grow 3.4% annually through 2011, driven in part by a shift toward higher value formulations. Interior applications such as flooring and cabinets will lead gains. Exterior uses will continue to suffer from wood's gradual market losses to lower-maintenance alternatives. This study analyzes the \$2.9 billion US wood protection industry, with forecasts for 2011 and 2016 by product, application and market. It also details market share and profiles major firms.

#2243 10/2007..... \$4500

Pigments: Inorganic, Organic & Specialty

US color pigment demand will grow 4.4% yearly through 2011, driven by a shift toward high-performance organic pigments and specialty types. Metallic, pearlescent and other specialty pigments will lead gains based on the need for more novel, eye-catching optical effects in automotive coatings, printing inks, plastics, cosmetics and toiletries. This study analyzes the \$3 billion US pigments industry, with forecasts for 2011 and 2016 by type and market. It also details market share and profiles major players.

#2232 08/2007..... \$4500

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