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## Frequently Asked Questions about the Paint and Coatings Industry



### Q. Does latex paint pose a threat to those who suffer from latex allergies?

No, latex paint is not made with latex rubber; in fact, “latex” is really just a decorative way to describe rubber-based paint. Latex paint is a carefully formulated polyvinyl material with acrylic resin and has never contained natural rubber. It is natural rubber that causes an allergic reaction, so people who have sensitivity to latex products are in no danger of having a reaction to latex paint.

### Q. How can a homeowner determine whether his or her house contains lead-based paint?

The U.S. Environmental Protection Agency, the U.S. Department of Housing and Urban Development, and the U.S. Consumer Protection Agency have published brochures to educate consumers about old lead paint. The National Paint and Coatings Association (NPCA) has combined these brochures into one easy-to-use publication, *Protect Your Family From Lead In Your Home and Keep It Clean: An Insider’s Guide to Lead-Safe Painting and Home Improvement*, — in both English and Spanish. This brochure is available for download from NPCA’s web site [www.paint.org](http://www.paint.org).

### Q. What are paint and coatings made of?

Paint is a group of emulsions consisting of pigments suspended in a liquid medium. Today, contemporary paints and coatings consist of countless compounds uniquely formulated to fulfill the varied requirements of hundreds of thousands of applications.

### Q. Why are coatings used?

Generally, coatings are applied to products to protect them from environmental corrosion, and improve their consumer appeal. In some cases, coatings are actually an elemental part of a product’s use, such as the coatings that protect food and beverages in metal cans from contamination and spoilage. Or, think of an automobile. It not only has a coat of paint for visual appeal, its coating also prevents rusting — adding to the value and longevity of the vehicle.

Imagine what the world would be like without the color and excitement added by paints and coatings. What would we do without little red wagons, bright yellow school buses, or brilliantly painted whirling carousel horses? While their value is hard to put a price on, the colored paints and coatings of our world add incalculable value and beauty to everything in it.

### Q. What types of companies are included in the U.S. paint and coatings industry?

The U.S. paint and coatings industry consists of approximately 800 companies. These include manufacturers of architectural coatings (i.e., house paint) and a diverse collection of other coatings, comprised of industrial coatings that include product coatings applied as part of the original manufacturing process, and special purpose coatings for ships, offshore oil and gas rigs, and highway and traffic markings. Suppliers and distributors of the raw materials that go into paint and coatings production are also part of the industry.

### Q. Can you tell me more about architectural coatings?

Architectural coatings are paints and coatings applied on-site to new and existing residential, commercial, institutional and industrial buildings. Some architectural coatings include:

Exterior waterborne (latex) paint  
Exterior solvent-borne (oil) paint  
Architectural lacquers

Interior waterborne (latex) paint  
Interior solvent-borne (oil) paint  
“Do-it-yourself” wood and furniture finishes

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Architectural coatings reach consumers, contractors, builders and the government via retail or wholesale distribution channels and outlets. Most architectural coatings today are water-based. Water-based paints first became popular in the 1950s. They were non-flammable and easy to clean off brushes, rollers and the painters themselves — especially compared to organic solvent-based (oil) paints.

But cleaner air emerged as a more compelling reason to use water-based paint in the environmentally conscious 1970s. As paint dries, the liquid portion evaporates. If the liquid is an organic solvent, the result is the emission of volatile organic compounds, which react with sunlight to form smog. Increasingly stringent clean-air regulations have resulted in improvements in water-borne technology and ever-increasing use of water as the liquid medium in paints and coatings. This development, plus ease of clean-up, accounts for the popularity of water-based coatings in the consumer market.

### **Q. What are industrial coatings?**

Industrial coatings are coatings that are factory-applied to manufactured goods as part of the production process. They are also known as OEM coatings (for Original Equipment Manufacture). Industrial coatings decorate and protect virtually all of our manufactured goods. Some OEM coatings include:

Automotive finish	Truck and bus finishes
Other transportation finishes (aircraft, railroad, etc.)	Wood furniture and fixtures finishes
Metal decorating finishes (can, container coatings)	Wood composition board flat-stock finishes
Paper and paperboard coatings (not ink)	Appliance finishes
Sheet, strip and coil coatings on metals	Machinery and equipment finishes
Electrical insulating varnishes	Metal furniture and fixtures finishes
Magnet wire coatings	

A good example of OEM coatings is the U.S. auto, truck and bus industry. Without that low-cost protection of paints and coatings, a car body would rust after less than one winter's driving in most parts of the country.

Industrial coatings also provide sealants against leaching in food and beverage cans. Nearly 100 billion beverage cans are shipped each year in the United States — and every one of them requires a coating inside, to form a barrier to prevent the contents from reacting with the can's metal.

### **Q. Can you tell me more about special purpose coatings?**

Special purpose coatings include marine paints, high performance maintenance coatings, automotive refinish paints, traffic and highway markings, and aerosol (spray) paints. Coatings in this category are used, primarily, where durability is a key objective. Some special purpose coatings include:

Industrial maintenance paints (interior, exterior)	Aerosol (spray) paints
Marine coatings (off-shore structures, marine refinishing coatings)	Roof coatings
Metallic paints (aluminum, zinc bronze, etc.)	Multi-color paints
Automobile refinishing coatings	Traffic paints

**Marine Coatings:** The marine coatings market consists mainly of coatings used to protect new and existing commercial ships; offshore oil and gas rigs and equipment; and pleasure craft.

**High Performance Maintenance Coatings:** High performance maintenance coatings are formulated to meet performance requirements in specific environments. These coatings are used in a range of industries to combat, largely, the corrosion of exposed steel found in structures, tanks, pipes, industrial equipment and tank linings. Some of the largest consumers of high performance maintenance coatings include: on-shore oil and gas exploration; production and transmission operations; petrochemical plants and refineries; public utilities; and food and beverage processing plants.

**Highway and Traffic Markings:** Roughly 90 percent of these paints and coatings used for roadways are purchased by state highway departments and city and county road authorities; the remaining 10 percent are for parking areas and airports. Traffic paints are specially formulated to dry quickly, in order to reduce roadway delays and exposure of highway workers to traffic. They are designed for high visibility, durability and adhesion.

**Aerosol Paints:** Coatings packaged in aerosol cans are used mostly for appliance touch-up, corrosion inhibition, and hobbies and crafts. The typical aerosol can holds about 10-12 ounces net weight of liquid, usually at a very low-solids level to facilitate spraying. Common propellants for aerosol paints are based on hydrocarbon gases like n-butane, isobutane and propane. Chlorofluorocarbon propellants were used at one time, but were phased-out in 1978, due to their harmful effect on the ozone layer.

*For more information about the Paint and Coatings Industry, visit [www.paint.org](http://www.paint.org).*