

Duranar® Fluoropolymer Coatings



High-Performance Coatings with No "or Equal"

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The paper also details the advantages of working with members of the PPG Certified ApplicatorSM Program (PPG/CAP)."

During their 40-year history, *Duranar* coatings have become recognized as the industry standard for exterior fluoropolymer coatings, thanks primarily to the product's unmatched durability as well as the accentuated level of color-making and color-matching expertise PPG offers.

In recent years, despite the proven track record of *Duranar* coatings, many architects and specifiers have begun to regard exterior fluoropolymer coatings as generic products with little discernable difference in durability, color quality, color selection or corrosion, chemical and abrasion resistance.

Formulation **The Duranar Coatings Advantage**

Not all exterior fluoropolymer coatings, also known as 70% polyvinylidene fluoride (PVDF) coatings, are created equal. *Duranar* coatings are superior because they are manufactured with 80% proprietary PPG products consisting of three distinct components:

Part 1: Proprietary PPG Resin System

The first component in *Duranar* coatings is the proprietary resin system. Seventy percent of this resin system is formulated with polyvinylidene fluoride (*Kynar 500®* or *Hylar 5000®*), while the remaining 30% of the resin system is made with a proprietary PPG resin. As the chart on page 2 demonstrates, the resin system represents less than 1/3 (28%) of the total coatings formulation.

Part 2: Proprietary PPG Color Pigments

The second component in the *Duranar* coatings formulation is proprietary color pigments that have been tested on literally thousands of exposure sites. None of the color pigments are added to the *Duranar* coatings palette until they have been exposure-tested under harsh conditions for a minimum of 10 years. Proprietary PPG color pigments constitute 18% of the *Duranar* coatings formula.

Part 3: Proprietary PPG Solvents

The third, final and largest component in *Duranar* coatings is the solvent. The quality of

This has led to a proliferation of "*Duranar* or equal" specifications that disregard the advantages of using *Duranar* coatings, which offer a host of benefits not available with competing coating products.

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the solvent in a coating is critical because it dissolves the resin to the desired consistency, disperses the pigment evenly throughout the coating and eases application. Proprietary PPG solvents make up 54% of the *Duranar* coatings formulation.

Given the array of ingredients required to make them, identifying *Duranar* coatings as 70% PVDF fluoropolymer coatings is somewhat misleading. That's because, as the chart on page 2 shows, this "generic" ingredient represents just 20% of the total product formulation. The other 80% of the *Duranar* coatings consists exclusively of proprietary PPG products.

This 80% difference is where *Duranar* coatings establish their performance edge. By formulating these products with proprietary resins, pigments and solvents developed and used exclusively by PPG, *Duranar* coatings are able to achieve the following performance advantages:

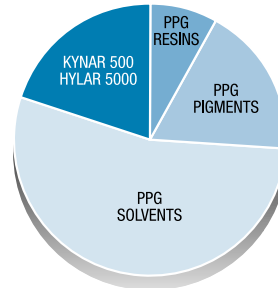
- *More than 40 years of proven performance on buildings of every type in every climate*
- *Longest color life and chalk resistance*
- *Superior corrosion resistance*
- *Exceptional chemical, humidity and salt spray resistance*
- *Excellent flexibility to cope with temperature-related expansion and contraction*

70% Fluoropolymers - Raw Materials

**70% KYNAR 500® or
HYLAR 5000®**

*(70% of the resin system is
Kynar 500 or Hylar 5000)*

**Kynar 500 – Arkema
Hylar 5000 – Solvay Solexis**



Duranar coatings are formulated with a proprietary PPG resin, a PVDF fluoropolymer resin, and proprietary PPG pigments and solvents. These proprietary products from PPG give Duranar coatings durability and colorfastness unmatched in the industry

Experience is the Difference

PPG has manufactured *Duranar*® coatings for aluminum for more than 40 years, making it by far the industry's most trusted and specified brand of exterior fluoropolymer coating. In fact, the company is the only remaining original licensee of *Kynar 500*®, the first-generation PVDF resin that serves as a base ingredient for Duranar coatings.

The success and durability of *Duranar* coatings is due to the broad experience PPG has in architectural coatings along with its expertise in a wide variety of other coatings applications, from auto and airplane finishes to consumer electronics, appliances, boat hulls and golf balls.

By synthesizing its expertise with the technical and aesthetic aspects of color, as well as its

familiarity with numerous wear conditions, PPG is able to develop proprietary coatings that provide beauty and protection to an exceptional array of aluminum architectural components, such as building panels, curtain walls, louvers and more.

With all this experience, it no coincidence that, with millions of gallons applied to buildings around the world, *Duranar* coatings have achieved a failure rate of less than one one-hundredth of a percent (< .001%).

Ultimately, the result of this superior performance is peace-of-mind for building owners and architects that far outweighs any incremental cost increases associated with specifying *Duranar* coatings over generic "or equal" products.

The Color of Duranar Coatings More Choice. Better Harmony.

Durability is one way to measure the performance of an architectural coating. Another is its appearance. *Duranar* coatings are available in more than 75,000 colors, with 1,000 new colors added to the database every month. Together, these tints represents the industry's widest color palette.

Along with an extensive color palette, *Duranar* coatings also are backed by an unequalled color-making and color-matching capability. The key is PPG's proprietary Kaleidoscope™ Color Management System. This digitally-based color calibration system ensures color consistency throughout the manufacturing process, from the production of the first sample to the actual application of the coating on the building.

That means, unlike other coatings manufacturers who use one process to create color samples and

another to produce the actual coatings, PPG uses the same process throughout. This offers advantages beyond more precise color calibration and color-matching; it also permits the economical manufacture of small-batch coatings. This facilitates faster delivery of coatings to the work site as well as reduced customer inventory and costs.

More than any other coatings manufacturer, PPG has also mastered the art and science of matching color across varying metal substrates and components. The company is especially adept at matching color across the different coating products, including fluoropolymers like *Duranar* coatings, as well as coatings based on acrylics and polyesters.

These dual areas of expertise offer architects and building owners the highest possible degree of color harmony across every surface of their building.

PPG Certified Applicator Program Providers of Quality

Another way PPG helps to ensure the superior appearance and performance of *Duranar* coatings is through the PPG Certified ApplicatorSM Program (PPG/CAP).

The PPG/CAP program encompasses a select nationwide network of exceptional coating applicators whose facilities and quality control processes are rigorously audited by PPG to deliver the highest possible level of product quality, customer service and technical expertise.

PPG Certified Applicators are also electronically integrated into the company's KaleidoscopeTM Color Management System, which incorporates a uniform color calibration system and the mandated use of PPG-designated software and equipment.

The result is a level of color consistency and product quality that is usually unattainable through the traditional acquisition of high-per-

formance coatings. In addition to enhanced coating consistency and quality, CAP members provide a heightened level of customer service, typified by the following benefits:

- **Priority Service on Color Samples**
- **Preferred Access to Proprietary PPG Coatings** – These include new products such as *Duranar*[®] XL and *Corafon*[®] EX.
- **Major Project Assistance** – Including job site visits and consultations when necessary.
- **Regional Sourcing** – From a nationwide network of integrated CAP participants.
- **Accelerated Delivery Schedules** – For fast-track construction projects.
- **Access to the World's Largest Color Database** – The PPG master color standards database already encompasses more than 75,000 colors, glosses and tints, a list that is expanding by more than 30 colors per day.

For more information on the advantages and benefits of specifying *Duranar* coatings by PPG, visit www.ppgideascales.com or call 1-888-PPG-IDEA.



www.ppgideascales.com
1.888.PPG.IDEA (774-4332)

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