

Product specifications of

TRI-Escent[®] II

2-coat mica color liquid spray exterior metal finish for architectural extrusion applications



All TRI-Escent II coatings are formulations of 70% polyvinylidene fluoride (PVDF) resin, which makes it the best choice for monumental or institutional projects.

Our history with this incredible technology dates back to the early 1970's.

Continually monitored AkzoNobel research and production quality assurance programs have produced years of actual 45° S. South Florida exposure data.

This data demonstrates TRI-Escent II's remarkable resistance to exterior weathering such as fading, color change, chalking and cracking.

TRI-Escent II is a unique 2-coat process that offers a wonderful alternative to both metallic and anodized finishes. This blend of mica and ceramic and inorganic pigments creates subtle yet dazzling design characteristics. A unique richness is achieved which goes beyond the capabilities of standard metallic colors. This system is more chemical resistant than an anodized finish, can be field repaired, and has a tighter color range than anodized.

By combining the concept of barrier coat and primer into one, AkzoNobel's technical team has unlocked the secret to minimization of "metallic flop." This combination also eliminates a step in the application process required by metallic colors, while improving the quality and appearance of the finish.

When specifying TRI-Escent II, refer to the code number of the color desired. The last two digits of the code will designate which basecoat/primer is to be used for that specific topcoat color.

Whether your color design requirements call for a bold statement or a soft and subtle appearance, AkzoNobel's wide array of TRI-Escent II colors should provide the desired effects. Should you wish to match a color provided by another manufacturer, our computer-aided

technicians will be happy to provide you with a corresponding match. Or, if you want something not found on a color card, we will assist you in the creation of a brand new color.

TRI-Escent II has become a very popular coating for factory application on aluminum as well as galvanized metal roofing and zinc/aluminum coated steel substrates. TRI-Escent II coatings provide long-term beauty for a wide range of metal building components such as panel systems, curtain-wall, window systems, louvers, canopies, mullions, store fronts and fascia.

If your specifications require a coating for several of these components on the same project, we have formulated TRI-Escent II for both spray and coil coating applications using the same pigmentation. This ensures continuity of color throughout an entire project.

Disclaimer

The information contained herein is correct to the best of our knowledge. It is offered in good faith, but not to be construed as warranties as to performance of results, since the conditions of use of our products are beyond our control. We suggest that you evaluate the information presented here and determine the suitability of our products prior to commercial scale application.

TRI-Escent II product specifications

| | |
|---------------------------------|--|
| Product Type | 70% polyvinylidene fluoride (PVDF) coating. |
| Specification | Meets or exceeds all AAMA 2605 specifications. |
| Primer | KY1C17839A, KA1C22454(P1) or KN1C22296(P2) |
| Percent Solids (Package) | Weight solids 44-49%, Volume solids 26-28%. |
| Percent Solids (Reduced) | Weight solids 35-40%, Volume solids 21-23%. |
| Reduction | Primer: 1-1 with Xylene. Topcoat: 15-25% by volume of Xylene/Butyl Carbitol blend then add Butyl Carbitol as needed for flow. |
| Viscosity | Primer: 20-23 seconds #4 Zahn @ 77° F (package), 16-18 seconds on Zahn #2 (reduced). Topcoat: 20-23 seconds #4 Zahn @ 77° F (package), 22-25 seconds on Zahn #2 (reduced). |
| Film Thickness | Primer: 1.5-2.5 wet mils, 0.3-0.5 mils dry. Topcoat: 4.0-6.0 wet mils, 1.1-1.3 mils dry. Total system: 1.4-1.8 mils dry. |
| Gloss Range | 15 to 25% @ 60° angle. |
| Cure Schedule | Lab bake cycle 10 minutes @ 450° F. Production cure varies with line speed and oven temperature. Metal temperature must achieve 450° F and be maintained for 2 minutes minimum. |
| Cure | H+ pencil hardness and 50 MEK double rubs. |
| Note | To help facilitate color uniformity, a special primer (P1 or P2) may be required. Please see Product Data Sheet. |

AAMA 2605 specification

| Test | Description | Coating Requirements | TRI-Escent II Performance |
|---------|---|---|------------------------------------|
| 7.1 | Color Uniformity | Visual Control | Instrument and visually controlled |
| 7.2 | Specular gloss at 60°, ASTM D 523 | Medium and low gloss ranges | Controlled to custom spec ±5 units |
| 7.3 | Dry film hardness, ASTM D 3363 | F minimum | H+ |
| 7.4 | Film adhesion (dry, wet and boiling water), crosshatch 1/16 inch squares | No removal between scribed times | No removal |
| 7.5 | Impact resistance (direct) 0.10 inch distortion | No removal of film | No removal |
| 7.7.1 | Chemical resistance (10% muriatric acid) | 15 minutes, no visual changes | Meets or exceeds spec |
| 7.7.2 | Chemical resistance (mortar, alkali) | 24 hours, no visual changes | Meets or exceeds spec |
| 7.7.3 | Resistance to acid pollutants (70% nitric acid) | 30 minutes, maximum 5ΔE NBS units color change | Meets or exceeds spec |
| 7.7.4 | Detergent resistance | 72 hours, no effect | Meets or exceeds spec |
| 7.8.1 | Humidity resistance, ASTM B 2247 | 4,000 hours, few #8 blisters (maximum) | Meets or exceeds spec |
| 7.8.2 | Salt spray resistance, ASTM B 117 | 4,000 hours, minimum 7 rating on scribe and minimum blister rating of 8 (ASTM D 1654) | Meets or exceeds spec |
| 7.9.1.2 | Weathering, color retention, ASTM D 2244 | 10 years, 45° S. South Florida, max 5ΔE NBS units color change | Meets or exceeds spec |
| 7.9.1.3 | Weathering, chalk resistance, ASTM D 4214 | 10 years, 45° S. South Florida, max 8 rating for colors, 6 rating for whites | Meets or exceeds spec |
| 7.9.1.4 | Gloss retention | 10 years, 50% minimum | Meets or exceeds spec |
| 7.9.1.5 | Weathering, erosion resistance | 10 years, 45° S. South Florida, maximum 20% loss | Meets or exceeds spec |

For more information, please contact:

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AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals. We supply industries and consumers worldwide with innovative products and are passionate about developing sustainable answers for our customers. Our portfolio includes well-known brands such as Dulux, Sikkens, International and Eka. Headquartered in Amsterdam, the Netherlands, we are consistently ranked as one of the leaders in the area of sustainability. With operations in more than 80 countries, our 50,000 people around the world are committed to delivering leading products and technologies to meet the growing demands of our fast-changing world.

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