**Product specifications of** 

# **TRI-Escent<sup>®</sup> II ULTRA**

Environmentally-friendly liquid spray 2-coat mica colors for architectural extrusion applications



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

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 ULTRA's remarkable resistance to exterior weathering such as fading, color change, chalking and cracking.

TRI-Escent II *ULTRA* is a unique 2-coat process that offers an alternative to other metallic or anodized finishes. This blend of mica and ceramic and inorganic pigments creates subtle yet dazzling design characteristics with a unique richness that goes beyond standard metallic colors. This system is more chemical resistant than an anodized finish, can be field repaired, and has a tighter color range. 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 ULTRA, 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 *ULTRA* colors should provide the desired effects. Should you wish to match a color provided by another manufacturer, we 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 *ULTRA* 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 *ULTRA* 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 *ULTRA* for both spray and coil coating applications using the same pigmentation. This ensures continuity of color throughout an entire project.

#### Why choose TRI-Escent II ULTRA?

TRI-Escent II *ULTRA* is the next generation of PVDF coatings. All finish types and color choices available in TRI-Escent II are now available in TRI-Escent II *ULTRA*. TRI-Escent II *ULTRA* is a more environmentally-friendly product, by containing a lower level of VOC's. Durability and performance of TRI-Escent II *ULTRA* is the same as the standard version, easily meeting or exceeding the AAMA 2605 specification.

#### 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 ULTRA 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 49-53%, Volume solids 31-35%.	
Percent Solids (Reduced)	Weight solids 38-40%, Volume solids 27-29%.	
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: 3.0-4.5 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 <i>ULTRA</i> 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 5∆E 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, $45^{\circ}$ S. South Florida, max $5\Delta$ E 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

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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 wellknown 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 fastchanging world.

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