

Product specifications of

# TRI-Escent® II *ULTRA*

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



**AkzoNobel**

Tomorrow's Answers Today

**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

<b>Product Type</b>	70% polyvinylidene fluoride (PVDF) coating.
<b>Specification</b>	Meets or exceeds all AAMA 2605 specifications.
<b>Primer</b>	KY1C17839A, KA1C22454(P1) or KN1C22296(P2)
<b>Percent Solids (Package)</b>	Weight solids 49-53%, Volume solids 31-35%.
<b>Percent Solids (Reduced)</b>	Weight solids 38-40%, Volume solids 27-29%.
<b>Reduction</b>	Primer: 1-1 with Xylene. Topcoat: 15-25% by volume of Xylene/Butyl Carbitol blend then add Butyl Carbitol as needed for flow.
<b>Viscosity</b>	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).
<b>Film Thickness</b>	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.
<b>Gloss Range</b>	15 to 25% @ 60° angle.
<b>Cure Schedule</b>	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.
<b>Cure</b>	H+ pencil hardness and 50 MEK double rubs.
<b>Note</b>	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	<b>Color Uniformity</b>	Visual Control	Instrument and visually controlled
7.2	<b>Specular gloss at 60°, ASTM D 523</b>	Medium and low gloss ranges	Controlled to custom spec ±5 units
7.3	<b>Dry film hardness, ASTM D 3363</b>	F minimum	H+
7.4	<b>Film adhesion (dry, wet and boiling water), crosshatch 1/16 inch squares</b>	No removal between scribed times	No removal
7.5	<b>Impact resistance (direct) 0.10 inch distortion</b>	No removal of film	No removal
7.7.1	<b>Chemical resistance (10% muriatric acid)</b>	15 minutes, no visual changes	Meets or exceeds spec
7.7.2	<b>Chemical resistance (mortar, alkali)</b>	24 hours, no visual changes	Meets or exceeds spec
7.7.3	<b>Resistance to acid pollutants (70% nitric acid)</b>	30 minutes, maximum 5ΔE NBS units color change	Meets or exceeds spec
7.7.4	<b>Detergent resistance</b>	72 hours, no effect	Meets or exceeds spec
7.8.1	<b>Humidity resistance, ASTM B 2247</b>	4,000 hours, few #8 blisters (maximum)	Meets or exceeds spec
7.8.2	<b>Salt spray resistance, ASTM B 117</b>	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	<b>Weathering, color retention, ASTM D 2244</b>	10 years, 45° S. South Florida, max 5ΔE NBS units color change	Meets or exceeds spec
7.9.1.3	<b>Weathering, chalk resistance, ASTM D 4214</b>	10 years, 45° S. South Florida, max 8 rating for colors, 6 rating for whites	Meets or exceeds spec
7.9.1.4	<b>Gloss retention</b>	10 years, 50% minimum	Meets or exceeds spec
7.9.1.5	<b>Weathering, erosion resistance</b>	10 years, 45° S. South Florida, maximum 20% loss	Meets or exceeds spec

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