

Product specifications of

TRI-Escent® II

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



AkzoNobel

Tomorrow's Answers Today

All TRI-Escent® II coatings are formulations of 70% KYNAR 500® or HYLAR® 5000 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% KYNAR 500® or HYLAR® 5000 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:

Akzo Nobel Coatings Inc.
1313 Windsor Ave.
Columbus, OH 43211
614.294.3361



AkzoNobel
Tomorrow's Answers Today

www.akzonobel.com/ccna

We're the largest global paints and coatings company and a major producer of speciality chemicals. We supply industries worldwide with quality ingredients for life's essentials. We think about the future, but act in the present. We're passionate about developing sustainable answers for our customers. Based in Amsterdam, the Netherlands, we have 60,000 employees working in more than 80 countries - all committed to excellence and delivering Tomorrow's Answers Today®.

© 2009 AkzoNobel NV. All rights reserved.
"Tomorrow's Answers Today" is a trademark of AkzoNobel NV.

TRI-Escent® is a registered trademark of an AkzoNobel company
KYNAR 500® is a registered trademark of Arkema
HYLAR® 5000 is a registered trademark of Solvay Solexis, Inc.
Revision Date: July 2009