

Product specifications of

# CERAM-A-STAR® E

Solid color liquid spray exterior finish for aluminum extrusion applications

AkzoNobel



**CERAM-A-STAR E is an exciting new solution for aluminum extrusion applications, with proven durability and ease of application.**

Available globally, CERAM-A-STAR E is the perfect choice for use in all environments that require an AAMA 2604 product.

Designed to meet the global demand for a mid-level high performance system, CERAM-A-STAR E delivers significant performance improvements over other AAMA 2604 products.

CERAM-A-STAR E is a new product designed for spray application to aluminum, meeting all the specs of AAMA 2604. Based on a proven coil coating technology, it brings a new level of durability to the mid-level market segment, at an economical price.

CERAM-A-STAR E takes the exceptional performance of CERAM-A-STAR 1050, a market-leading SMP coil coating, and adapts it to the high-performance / AAMA 2604 market segment. CERAM-A-STAR 1050 is the coil coating industry's benchmark silicone-modified polyester, with unmatched chalk and fade resistance and exceptional hardness for long-term durability.

CERAM-A-STAR E's performance comes from a proprietary resin formulation that has been proven through real-world testing and field installations for over 15 years. This unique resin system gives it vastly superior hardness and mar resistance over other AAMA 2604 products, which is a major benefit during installation and aggressive environments.

CERAM-A-STAR E has 15 years of South Florida real world weathering exposure data, something that most new coating solutions can't say. Since it's based on an already proven product with millions of square feet already installed in the field, you can rest assured its performance will stand up over time.

To assure proper application, AkzoNobel utilizes a process of Applicator Certification. Only after meeting stringent repeatable quality standards is an applicator granted this approval. This helps protect the integrity of the finish for all parties concerned.

#### Field Performance

When applied in accordance to specifications the following field performance can be expected from CERAM-A-STAR E.

<b>Film Integrity</b>	10 years
<b>Chalk</b>	Colors: no more than #8 for 10 years Whites: no more than #6 for 10 years
<b>Fade</b>	No more than 5 ΔE Hunter units for 10 years

#### 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.

---

# CERAM-A-STAR E

## product specifications

### for aluminum

---

<b>Product Type</b>	Silicone-modified polyester coating.
<b>Specification</b>	Meets or exceeds all AAMA 2604 specifications.
<b>Primer</b>	Optional. Recommended in aggressive environments.
<b>Percent Solids (Package)</b>	Weight solids 48-60%, Volume solids 37-45%.
<b>Percent Solids (Reduced)</b>	Weight solids 40-53%, Volume solids 30-34%.
<b>Reduction</b>	15-25% by volume of Xylene/Butyl Carbitol blend then add Butyl Carbitol as needed for flow.
<b>Viscosity</b>	17-19 seconds #3 Zahn @ 77° F (package), 22-25 seconds on Zahn #2 (reduced).
<b>Film Thickness</b>	2.4-4.0 wet mils, 1.0-1.2 mils dry.
<b>Gloss Range</b>	25 to 35% @ 60° angle.
<b>Cure Schedule (Aluminum)</b>	Lab bake cycle 10 minutes @ 350° F. Production cure varies with line speed and oven temperature. Metal temperature must achieve 350° F and be maintained for 2 minutes minimum.
<b>Cure</b>	H+ pencil hardness and 50 MEK double rubs.

---

# AAMA 2604 specification

Test	Description	Coating Requirements	CERAM-A-STAR E 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,</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
7.6	<b>Abrasion resistance, ASTM D 968</b>	Abrasion coefficient value, 20 minimum	Exceeds spec
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
7.7.5	<b>Window cleaner resistance</b>	24 hours, no visual change	Meets or exceeds spec
7.8.1	<b>Humidity resistance, ASTM D 2247</b>	3,000 hours, few #8 blisters (maximum)	Meets or exceeds spec
7.8.2	<b>Salt spray resistance, ASTM B 117</b>	3,000 hours, minimum 7 rating on scribe and minimum blister rating of 8 in field	Meets or exceeds spec
7.9.1.2	<b>Weathering, color retention, ASTM D 2244</b>	5 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 659</b>	5 years, 45° S. South Florida, max 8 rating for colors, 6 rating for whites	Meets or exceeds spec
7.9.1.5	<b>Weathering, erosion resistance</b>	5 years, 45° S. South Florida, maximum 20% loss	Meets or exceeds spec



[www.akzonobel.com/ccna](http://www.akzonobel.com/ccna)

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.

© 2014 Akzo Nobel NV. All rights reserved.

CERAM-A-STAR is a registered trademark of an Akzo Nobel company  
Revision Date: June 2014