

The qualities of

# ALUM-A-DURE®

One-coat paint system for aluminum to meet a variety of end-uses

AkzoNobel



## Product information and specifications for ALUM-A-DURE high-performance finishes for aluminum substrates

### Product Information

ALUM-A-DURE technology is a coil coating system designed specifically for aluminum substrates. Specially formulated to be one-coat systems (or painted over a primer layer for extra corrosion performance) this product offers a balance between performance and economics.

ALUM-A-DURE offers a coating film displaying excellent smoothness, depth of image and easy-clean surface. This exceptional coating also combines a balance between good hardness and flexibility while maintaining resistance to dirt and staining. ALUM-A-DURE coatings can be used over aluminum substrates for applications such as truck trailer, lighting fixture, screen frame and more.

ALUM-A-DURE coatings are supplied in various formulations to meet a variety of needs:

- ALUM-A-DURE P (Polyester) – engineered from AkzoNobel's proprietary polyester resin, this system provides robustness and economics.
- ALUM-A-DURE SF (Screen Frame) – modified polyester system providing additional flexibility and formability.
- ALUM-A-DURE A (Acrylic) – acrylic backbone providing exceptional film toughness.

### General System Information

ALUM-A-DURE is approved for use as a one-coat system over Aluminum substrate. ALUM-A-DURE is a factory-applied finish that is applied through roll coating to properly cleaned and pre-treated first-quality substrate, and then oven-baked to cure.



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Physical Address:  
1313 Windsor Ave.  
Columbus, OH 43211

## Application Characteristics

|                           |  |
|---------------------------|--|
| <b>General</b>            | Substrate: Aluminum. Application: Roll coating of one-coat or two-coat system. System: When required, use Akzo Nobel recommended Proprietary Solvent and ALUM-A-DURE® topcoat, over properly cleaned and pre-treated aluminum substrate. |
| <b>Surface Appearance</b> | Smooth and free of streaks, blistering and other imperfections.  |
| <b>Film Thickness</b>     | Topside finish: Primer (dry) = as required; Topcoat (dry) = 0.70 - 0.80 mil. Reverse side finish: Primer (dry) = as required; Clear polyester backer (dry) = 0.20 - 0.30 mil. All measurements per ASTM D 1005 or D 5796.                |
| <b>Topside Color</b>      | Controlled to the Master Standard by an approved Color Difference Meter or Spectrophotometer, and by visual match under daylight and horizon light of a Macbeth Daylight Booth per ASTM D 1729.  |

## Physical Properties

|   |   |
|---|---|
| <b>Specular Gloss</b>                     | Determined per ASTM D 523 at a gloss meter angle of 60°. Gloss rating per customer nominal specification, ±5% specular reflectance. ALUM-A-DURE® systems are 35% ±5%, but can be made available in both higher and lower gloss ranges upon special request. |
| <b>Hardness</b>                           | Minimum pencil hardness, using Eagle Turquoise Pencils per ASTM D 3363, is "F".   |
| <b>Cure Test</b>                          | Cured in baking oven to withstand 100 double rubs of a MEK soaked cloth, per ASTM D 5402, to expose substrate or primer.  |
| <b>Cross-Hatch Adhesion</b>               | No paint removal with Scotch #610 cellophane tape after cross-scoring with eleven horizontal and eleven vertical lines 1/8" apart, per ASTM D 3359.   |
| <b>Direct and Reverse Impact Adhesion</b> | No visible paint removal with Scotch #610 cellophane tape after direct and reverse impact of 1.5 X metal thickness, using 5/8" steel ball on a Gardner Impact Tester per ASTM D 2794.   |
| <b>Bend Adhesion</b>                      | Per ASTM D 4145-83, no loss of adhesion when taped with Scotch #610 cellophane tape when subjected to a 0T diameter 180° bend test on 0.017" Aluminum substrate,  |

## Testing Data

|                                     |  |
|-------------------------------------|--|
| <b>Humidity Resistance</b>          | No blistering, cracking, peeling, loss of gloss or softening of the finish after 1000 hours of exposure to 100% humidity at 100° F ± 5° F, per Federal Test Method Standard 141, Method 6201 or ASTM D 2247.   |
| <b>Cleveland Condensing Cabinet</b> | No blistering or white rust after 240 hours at 140°F, with a 15 - minute dry off period every 6 hours, per ASTM D 4585.  |
| <b>Water Immersion Resistance</b>   | Samples immersed in distilled water at 100°F per ASTM D 870 will exhibit no loss of gloss, blistering, cracking, color changing or softening of finish after 500 hours. After 1000 hours, samples will exhibit no loss of gloss, color change, cracking, and no blistering greater than medium #6 over 20% of test area per ASTM D 714. Slight softening of the finish may be observed when first removed from immersion; original hardness will be regained after 24 hours at room temperature. |
| <b>Salt Spray Resistance</b>        | Samples diagonally scored and subjected to 5% neutral salt spray for 1000 hours, per ASTM B 117, then taped 1 hour after removal from the test cabinet with Scotch #610 cellophane tape, exhibit no blistering and no loss of adhesion greater than 1/8" from score line.  |
| <b>Chemical Resistance</b>          | No significant color change after 24 hours exposure to 10% solutions of hydrochloric and sulfuric acids, per ASTM D 1308-87, Procedure 6.2 (spot test).  |



[coilcoatings.akzonobel.com/us](http://coilcoatings.akzonobel.com/us)

We've been pioneering a world of possibilities to bring surfaces to life for well over 200 years. As experts in making coatings, there's a good chance you're only ever a few meters away from one of our products. Our world class portfolio of brands - including Dulux, International, Sikkens and Interpon - is trusted by customers around the globe. We're active in more than 150 countries and have set our sights on becoming the global industry leader. It's what you'd expect from the most sustainable paints company, which has been inventing the future for more than two centuries.

For more information please visit [www.akzonobel.com](http://www.akzonobel.com).

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Revision Date: February 2021