# The qualities of **TRINAR<sup>®</sup> Matte**

A rich look with modern appeal



# Product information and performance specifications for TRINAR Matte high-performance fluoropolymer finishes

### **Product Information**

TRINAR Matte is an offering of coil coatings with low gloss and low sheen characteristics, specially formulated to reduce glare and present a rich, soft appearance. Available in a wide range of colors, TRINAR Matte provides a modern look that will enhance any design.

TRINAR Matte is a high-performance fluoropolymer coating containing 70% polyvinylidene (PVDF) resin. This unique resin is combined with other proprietary resins and the highest quality ceramic and selects inorganic pigments for the finest metal finish available.

TRINAR Matte is tough but flexible, enabling architectural expression and making it an ideal choice for metal roofing, wall panels, siding, canopies and fascia. It is perfectly suited for commercial, institutional, or high-end residential and agricultural installations.

When used in conjunction with one of our High Performance Primers, the TRINAR system provides protection for decades against harsh environmental weathering. Proven to withstand Mother Nature's toughest elements, the TRINAR system meets or exceeds all requirements of AAMA 620/621 and AAMA 2605 for high performance exterior coatings. Available for over 30 years, TRINAR coatings are protecting and decorating buildings at locations across the world, where they continually demonstrate their durability and outstanding color and gloss retention. With TRINAR you are assured your project will look good for many years after installation.

### Field Performance

TRINAR Matte is one component of a total paint system. When applied in accordance to specifications the following field performance can be expected.

Film Integrity	35 years
Chalk	No more than #8 for 35 years
Fade	No more than 5 $\Delta E$ Hunter units for 35 years

### **General System Information**

TRINAR Matte is approved for use on the following substrates: Hot-Dipped Galvanized (HDG), Galvalume®, Galfan® and Aluminum.

TRINAR Matte is a factory-applied finish that is administered through roll coating to properly cleaned and pretreated first-quality substrates, and then oven baked to cure. It is a two-coat system, composed of a topcoat over one of our High Performance Primers.

## TRINAR Matte COOL CHEMISTRY® Series

TRINAR Matte is also available in our COOL CHEMISTRY Series, which contains ceramic infrared reflective pigments. These special pigments are designed to reflect infrared energy while still absorbing visible light energy, thus appearing as the same color yet staying much cooler. When COOL CHEMISTRY coatings are used on metal roofing, the result is a sustainable building material that can lower air conditioning costs, reduce peak energy demand, and help to mitigate urban heat island effects. All of our high-performance coatings for building products are also available in COOL CHEMISTRY versions.

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## **TRINAR<sup>®</sup> Coatings.** The color you spec is the color that stays.

Film Thickness	Topside finish: Primer (dry) = 0.20 - 0.30 mils; Topcoat (dry) = 0.70 - 0.80 mils; Reverse side finish: Primer (dry) = 0.15 - 0.25 mils;
	Pigmented backer (dry) = 0.30 - 0.40 mils. Total DFT for system = 0.90 - 1.10 mils. All measurements per ASTM D 5796.
Topside Color	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	
Specular Gloss	Determined per ASTM D 523 at a glossmeter angle of 60°. TRINAR MATTE systems are typically 8 – 12%.
Specular Sheen	Determined per ASTM D 523 at a glossmeter angle of 85°. TRINAR MATTE systems are typically 15 – 20%
Pencil Hardness	Minimum pencil hardness, per ASTM D 3363, is "HB".
Solvent Resistance	Passes minimum of 100 double rubs of a MEK soaked cloth, per ASTM D 5402.
Cross-Hatch Adhesion	No paint removal with Scotch #610 cellophane tape after cross-scoring with eleven horizontal and eleven vertical lines 1 mm apart, per ASTM D 3359.
Impact Resistance	No visible paint removal with Scotch #610 cellophane tape after direct and reverse impact of 80-inch pounds, using 5/8" steel ball or a Gardner Impact Tester, per ASTM D 2794.
T-Bend Adhesion	Per ASTM D 4145, no loss of adhesion when taped with Scotch #610 cellophane tape when subjected to a 2T-Bend.
Testing Data	
Humidity Resistance	No blistering, cracking, peeling, loss of gloss or softening of the finish after 2000 hours (HDG, Galvalume) or 3000 hours (Aluminum) of exposure to 100% humidity at 100°F ± 5°F, per ASTM D 2247.
Cleveland Condensing	No blistering, rusting or loss of adhesion of the finish after 1500 hours (HDG, Galvalume) or 3000 hours (Aluminum) of exposure at 120°F, per ASTM D 4585.
Water Immersion Resistance	Samples immersed in distilled water at 100°F per ASTM D 870 will exhibit no loss of gloss, blistering, cracking or color change after 500 hours.
Salt Spray Resistance	Samples diagonally scored and subjected to 5% neutral salt spray for 1000 hours (HDG, Galvalume) or 3000 hours (Aluminum), per ASTM B 117, then taped 1 hour after removal from the test cabinet with Scotch #610 cellophane tape, exhibit no blistering, no loss of adhesion and scribe creep no greater than 1/8".
Salt Spray Resistance Chemical Resistance	Samples diagonally scored and subjected to 5% neutral salt spray for 1000 hours (HDG, Galvalume) or 3000 hours (Aluminum), per ASTM B 117, then taped 1 hour after removal from the test cabinet with Scotch #610 cellophane tape, exhibit no blistering, no loss of
Chemical Resistance	<ul> <li>Samples diagonally scored and subjected to 5% neutral salt spray for 1000 hours (HDG, Galvalume) or 3000 hours (Aluminum), per ASTM B 117, then taped 1 hour after removal from the test cabinet with Scotch #610 cellophane tape, exhibit no blistering, no loss of adhesion and scribe creep no greater than 1/8".</li> <li>No significant color change after 24 hours exposure to 10% solutions of hydrochloric and sulfuric acids, per ASTM D 1308, Procedure</li> </ul>
Chemical Resistance Kesternich Test	<ul> <li>Samples diagonally scored and subjected to 5% neutral salt spray for 1000 hours (HDG, Galvalume) or 3000 hours (Aluminum), per ASTM B 117, then taped 1 hour after removal from the test cabinet with Scotch #610 cellophane tape, exhibit no blistering, no loss of adhesion and scribe creep no greater than 1/8".</li> <li>No significant color change after 24 hours exposure to 10% solutions of hydrochloric and sulfuric acids, per ASTM D 1308, Procedure 7.2 (spot test).</li> </ul>
	<ul> <li>Samples diagonally scored and subjected to 5% neutral salt spray for 1000 hours (HDG, Galvalume) or 3000 hours (Aluminum), per ASTM B 117, then taped 1 hour after removal from the test cabinet with Scotch #610 cellophane tape, exhibit no blistering, no loss of adhesion and scribe creep no greater than 1/8".</li> <li>No significant color change after 24 hours exposure to 10% solutions of hydrochloric and sulfuric acids, per ASTM D 1308, Procedure 7.2 (spot test).</li> <li>No significant color change after 10 cycles in a SO2 chamber, per ASTM G 87.</li> <li>5 Hunter ΔE maximum color change, and at least #8 chalk rating after 10,000 hours exposure, per ASTM G 151 and G 154 using</li> </ul>
Chemical Resistance Kesternich Test Accelerated Weathering	<ul> <li>Samples diagonally scored and subjected to 5% neutral salt spray for 1000 hours (HDG, Galvalume) or 3000 hours (Aluminum), per ASTM B 117, then taped 1 hour after removal from the test cabinet with Scotch #610 cellophane tape, exhibit no blistering, no loss of adhesion and scribe creep no greater than 1/8".</li> <li>No significant color change after 24 hours exposure to 10% solutions of hydrochloric and sulfuric acids, per ASTM D 1308, Procedure 7.2 (spot test).</li> <li>No significant color change after 10 cycles in a SO2 chamber, per ASTM G 87.</li> <li>5 Hunter ΔE maximum color change, and at least #8 chalk rating after 10,000 hours exposure, per ASTM G 151 and G 154 using UVA-340 bulbs. Not a substitute for Natural Exterior Weathering.</li> <li>Florida exposure (45° South), 5 Hunter ΔE maximum color change, per ASTM D 2244, and at least #8 chalk rating, per ASTM D 4214,</li> </ul>



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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 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.

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