

AURA[®] 143-HY Metalized High Intensity Prismatic Grade

Product Code: 0143-HY (Hybrid Polymer) Product Data Bulletin

Product Overview

Aura Optical Systems' AURA[®] 143-HY Metalized High Intensity Prismatic Grade is a microprismatic retroreflective sheeting designed for use on a variety of safety, graphics, or traffic applications where high levels of reflectivity are required, such as delineators or vehicle markings. Incorporates the Hybrid Polymer technology for enhanced film strength and impact resistance.

Key Features

- Metalized, single-ply construction to prevent edge-lifting or delamination
- No edge sealing required
- Special hybrid-polymer face film for strength and impact resistance
- Aggressive high-tack adhesive
- Durable and UV-resistant acrylic outer-shell for extended outdoor life
- Excellent levels of retroreflection from multiple viewing angles

Color Availability

Product Code	Color
0143-00	White
0143-01	Yellow
0143-02	Red
0143-05	Blue
0143-07	Green

Other colors available upon request.

*** Patent Pending ***

Physical Characteristics & Properties

Durability	Up to 7-years when properly installed (vertical exposure)
Retroreflective Elements	Microprisms, metalized with vacuum-deposited aluminum
Tape Thickness	13 mils, excluding release liner
Face Film	Proprietary blend of polymers with UV-resistant acrylic outer-shell
Release Liner	HDPE Release Liner
Application Surface	Aluminum. Painted metals. Wet application method is not recommended.
Application Temperature	15°C (60°F) minimum
Printing	Can be screen printed with many solvent or UV inks

Retroreflection

Typical Coefficient of Retroreflection (cd/lx/m²)

Color	Observation Angle	Entrance Angle	
		-4°	30°
White	0.2°	500	250
	0.2°	350	175
Yellow	0.2°	120	65
	0.2°	30	15
Red	0.2°	75	35
	0.2°		
Blue	0.2°		
	0.2°		
Green	0.2°		
	0.2°		

Average of 0° and 90° rotations.



Aura Optical Systems, L.P.
 7415 Whitehall, Suite 111
 Ft. Worth, Texas 76118 U.S.A.
 General / International Inquires: +1 (801) 668-3439
 USA Sales Inquiries: +1 (682) 227-1208
www.auraopticalsystems.com

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Daytime Color

The color of the tape shall fall within the four pairs of chromaticity coordinates (CIE 1931 Standard Colorimetric System) when measured with Standard Illuminant D65 using a 0/45 (45/0) geometry instrument.

Color	1		2		3		4		Cap Y%	
	x	y	x	y	x	y	x	y	Min	Max
White	.303	.300	.368	.366	.340	.393	.274	.329	15	--
Yellow	.498	.412	.557	.442	.479	.520	.438	.472	12	30
Red	.648	.351	.735	.265	.629	.281	.565	.346	2.5	11
Blue	.140	.035	.244	.210	.190	.255	.065	.216	1.0	10
Green	.026	.399	.166	.364	.286	.446	.207	.771	3.0	12

Application Guidelines

Aura Optical Systems' AURA[®] 143-HY Metalized High Intensity Prismatic Grade should be applied only to clean and dry surfaces when temperatures are above 60°F. Wipe surfaces with rubbing alcohol (or similar solvent cleaner) and allow the surface to completely dry prior to application. Wet application methods should not be utilized. Apply only to surfaces free of rust, dirt, loose paint, or other contaminants.

For freshly painted surfaces, the paint should be allowed to cure for at least 48-hours prior to application of the conspicuity tape.

Application over large rivets or sharp corrugations is not recommended. For application over smaller rivets (< 1/2 inch), use a punching tool, such as an arch punch or belt punch, to cut the reflective material around the rivet surface.

User should always test the compatibility of AURA[®] 143-HY with their specific substrate.

Storage


Store in a cool, dry area. Use within 1-year of receipt of the product.

Warranty Information

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