

ORALITE® Series 5900 High Intensity Prismatic Grade Reflective Film

Description

9-mil, 10-year, highly reflective, weatherproof film with excellent corrosion and solvent resistance. Meets ASTM D 4956 specifications for Type IV, Class 1 retroreflective sheeting. Available in 7 colors.

Release Liner

3-mil, polypropylene film, silicone coated on one side

Adhesive

Clear, solvent polyacrylate, permanent adhesive

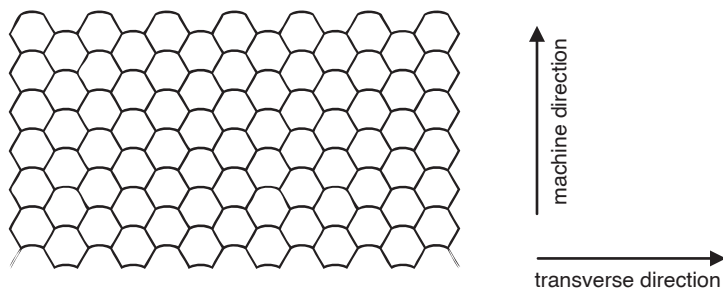
Applications

Designed for the production of long-term traffic control, guidance, warning and informational signs.

Technical Data

Thickness (without liner and adhesive)	9 mil
Temperature Resistance	Adhered to aluminum, -69°F to +180°F, no variation
Adhesive Power (FINAT TM-1, after 24 h, average)	Adhered to stainless steel: 3.4 lb/in (tear of film)
Seawaterability (DIN 50 021)	Adhered to aluminum, after 100h/74°F, no variation
Resistance to Solvents and Chemicals	With expert application, resistant to most oils, greases, fuels, aliphatic solvents, weak acids, salts and alkalis
Resistance to Cleaning Agents	Adhered to aluminum, 8h in 0.5% household cleaning agents at room temperature and 149°F, no variation
Shelf Life (68°F/50% relative humidity)	2 years
Minimum Life Expectancy (based on accepted application procedures on vertical surfaces)	10 years (unprinted)
Minimum Application Temperature	50°F
Available Lengths	150' (50-yard)
Available Widths (inches)	48
Print Compatibility	UV and Screen Printing

Sealing Pattern and Application Directions



Attention

Recycling Recommendation: Waste class similar to household waste, is to be recycled according to the local regulations.

Surfaces to which the material will be applied must be cleaned thoroughly of dust, grease or any contaminants. Freshly lacquered or painted surfaces should be allowed to stand for at least three weeks after complete curing. The compatibility of selected lacquers and paints should be tested by the end-user prior to use.

The statements in this information sheet are based upon our knowledge and practical experience. This data is intended only as a source of information and is given without any guarantee and does not constitute a warranty. Due to the wide variety of possible uses and applications, customers should independently determine the suitability of this material for their specific purpose, prior to use.



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Technical Data

ORALITE® Series 5900 meets the following ASTM D 4956 specifications for Type IV, Class 1 retroreflective sheeting.

Observation Angle	Minimum coefficient of retroreflection (R) cd/ft ² (cd · lx ⁻¹ · m ²)						Daytime Luminance Factor (Y%)	
	0.1°		0.2°		0.5°		Minimum	Maximum
	-4°	30°	-4°	30°	-4°	30°		
white 010	500	240	360	170	150	72	27	
yellow 020	380	175	270	135	110	54	15	45
orange 035	200	94	145	68	60	28	10	30
red 030	90	42	65	30	27	13	2.5	15
green 060	70	32	50	25	21	10	3	12
blue 050	42	20	30	14	13	6	1	10
brown 080	25	12	18	8.5	7.5	3.5	1	9

Color Specification Limits (Daytime)*

	1		2		3		4	
	x	y	x	y	x	y	x	y
white 010	0.303	0.300	0.368	0.366	0.340	0.393	0.274	0.329
yellow 020	0.498	0.412	0.557	0.442	0.479	0.520	0.438	0.472
orange 035	0.558	0.352	0.636	0.364	0.570	0.429	0.506	0.404
red 030	0.648	0.351	0.735	0.265	0.629	0.281	0.565	0.346
green 060	0.026	0.399	0.166	0.364	0.286	0.446	0.207	0.771
blue 050	0.140	0.035	0.244	0.210	0.190	0.255	0.065	0.216
brown 080	0.430	0.340	0.610	0.390	0.550	0.450	0.430	0.390

Color Specification Limits (Nighttime)*

	1		2		3		4	
	x	y	x	y	x	y	x	y
white 010	----- no requirement -----							
yellow 020	0.513	0.487	0.500	0.470	0.545	0.425	0.572	0.425
orange 035	0.595	0.405	0.565	0.405	0.613	0.355	0.643	0.355
red 030	0.650	0.348	0.620	0.348	0.712	0.255	0.735	0.265
green 060	0.007	0.570	0.200	0.500	0.322	0.590	0.193	0.782
blue 050	0.033	0.370	0.180	0.370	0.230	0.240	0.091	0.133
brown 080	0.595	0.405	0.540	0.405	0.570	0.365	0.643	0.355

*The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with CIE Standard Illuminant D65.

