

Description

3.5-mil*, commercial grade, reflective film. Available in white, yellow, orange, red, green and blue.

Release Liner

89# PE-coated silicone paper

Adhesive

Clear, solvent-based, permanent adhesive

Area of Use

This film is suitable for the manufacture of short- to medium-term, outdoor, economical, reflective traffic, guidance, warning and information signs as well as reflective lettering, numbers and symbols that are not required to comply with national specifications for retroreflectivity. Meets ASTM D 4956 specifications for Type I, Class 1 retroreflective sheeting.

Technical Data

Thickness* (without liner and adhesive)	3.5-mil*
Temperature resistance**	Adhered to aluminum, -58°F to +180°F
Suitable fire extinguishing media	Water spray mist, dry extinguishing agent, carbon dioxide, foam
Fire Rating	ASTM E 84-07 Class "A"
Adhesive power* (FINAT-TM 1 after 24h, stainless steel)	3.42 lb/in film tear
Tensile Strength (DIN EN ISO 527)	Along: Min. 10 MPa Across: Min. 10 MPa
Elongation at Break (DIN EN ISO 527)	Along: Min. 20% Across: Min. 20%
Saltwater resistance (DIN 50021)	Adhered to aluminum, after 100 h/ 73°F no variation
Resistance to solvents and chemicals	With expert application resistant to most oils, grease, fuels, Aliphatic solvents, weak acids, salts and alkalis
Shelf life**	2 years
Minimum Life Expectancy*** (based on accepted Application procedures on vertical surfaces)	7 years
Application Temperature	50° F
Available Lengths	150; (50yard) , 30' (10-yard)
Available Widths	15" (punched), 24", 30", 48"
Print Compatibility	Thermal printing, Screen printing: ORALITE® 5018 Screen Printing Ink is recommended

* average ** in original packaging, at 68° C and 50% relative humidity

***standard central European climate

Product Data

ORALITE® 5300 meets the following ASTM D 4956 specifications for Type I, Class 1 retroreflective sheeting.

Observation Angle	Minimum coefficient of retroreflection (R) cd/ft ² (cd • lx ⁻¹ • m ⁻²)				Daytime Luminance Factor (Y%)	
	0.2°		0.5°		Minimum	Maximum
Entrance Angle	-4°	30°	-4°	30°		
white 010	70	30	30	15	27	
yellow 020	50	22	25	13	15	45
orange 035	25	7	13	4	10	30
red 030	14	6	7.5	3	2.5	15
green 060	9	3.5	4.5	2.2	3	12
blue 050	4	1.7	2	0.8	1	10



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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

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

*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.

Note:

All ORALITE® products are manufactured within an ISO 9001:2008 controlled manufacturing environment and batch traceability is possible on the basis of the roll number.

IMPORTANT NOTICE

When using ORALITE® sheeting, please comply with relevant national specifications. ORAFOL recommends obtaining the current requirements from your local authority and ensure product conformance with such requirements. Please contact ORAFOL for further information.

All ORALITE® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORALITE® products is based upon research which the Company believes to be reliable, although, such information does not constitute a warranty. Because of the variety of uses of ORALITE® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. All specifications are subject to change without prior notice.

Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be allowed to dry for at least three weeks and to completely cure respectively. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. The self-adhesive reflective material can only be used for dry application. The low tensile strength of the material can make the removability of the reflective film more difficult. Please review applicable application information published by ORAFOL.

No warranty is given for purposes other than those listed in the Technical Datasheet or which are not processed according to ORAFOL's processing and handling instructions. The durability of the signs will depend on a variety of factors, including but not limited to substrate selection and preparation, compliance with recommended application guidelines, geographic area, exposure conditions and maintenance of the product and finished sign. Sign failures caused by the substrate or improper surface preparations are not the responsibility of ORAFOL. Please refer to the full warranty document available at www.orafolamericas.com for detailed information.

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

ORALITE® is a trademark of ORAFOL Europe GmbH.



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