

ORALITE® 5860 HIGH INTENSITY CONSTRUCTION GRADE REFLECTIVE FILM

Technical
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Description

10-mil*, 5-year, highly reflective film. Meets ASTM D 4956 specifications for Type III, Class 1 retroreflective sheeting. Available in 6 colors.

Release Liner

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

Adhesive

Clear, solvent-based, permanent adhesive

Area of Use

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

Technical Data

Thickness* (without liner and adhesive)	10-mil
Temperature resistance	Adhered to aluminum, -68°F to 180°F
Suitable Fire Extinguishing Media	Water spray mist, dry extinguishing agent, carbon dioxide, foam
Fire Rating	ASTM # 84-07 Class "A"
Adhesive Power* (FINAT TM-1, after 24h, average)	Adhered to stainless steel: 3.42 lb/in (tear of film)
Seawaterability (DIN 50021)	Adhered to aluminum, after 100h at 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
Resistance to cleaning agents	Adhered to aluminum, 8h in wash-alcalica (0,5% household cleaning agents) at room temperature and 149°F, no variation
Shelf life**	2 years
Minimum Application temperature	> +50°F
Minimum life expectancy*** (based on accepted Application procedures on vertical surfaces)	5 years (unprinted)
Available lengths	150' (50-yard)
Available widths (in inches)	10
Print Compatibility	Screen Printing

*average ** in original packaging, at 68°F and 50% relative humidity *** standard central European climate



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Product Data

ORALITE® Series 5860 meets the following ASTM D 4956 specifications for Type III, 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	300	180	250	150	95	65	27	
yellow 020	200	120	170	100	62	45	15	45
orange 035	120	72	100	60	30	25	10	30
red 030	54	32	45	25	15	10	2.5	15
green 060	54	32	45	25	15	10	3	12
blue 050	24	14	20	11	7.5	5	1	10

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.



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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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