

Description

ORALITE® 5237M Prismatic Economy Grade is a weather resistant, flexible retroreflective film designed for reflective advertising products for short-term outdoor usage. The material is intended for banners and public signs which are not mounted permanently but require easy mounting and demounting of the sign for use in multiple locations. The material can be easily cut without the necessity for edge sealing. The backing is a highly weather and water resistant, flexible 280 µm tarpaulin backing.

The retro reflective system of the ORALITE® 5237M Prismatic Economy Grade consists of metalized micro-prisms bonded to a flexible, smooth-surfaced tough and weather resistant UV stabilized polymeric film. The surface of reflective sheeting can be screen printed.

Retroreflectivity

Typical values for the coefficient of retroreflection (R') for ORALITE® 5237M Prismatic Economy Grade are shown in Table 1 when illuminated with CIE standard illuminant A and measured with the provisions of CIE no. 54. The values are an average of rotation angles 0° and 90°.

Colour

ORALITE® 5237M Prismatic Economy Grade is available in white (010) and yellow (020). The colour shall be within the area defined by the chromaticity coordinates and luminance factor provided in Table 2, when measured in accordance with the provisions of CIE No. 15.2 (illuminant D₆₅).

Printing

We recommend ORALITE® screen printing ink series 5010 and 5018. Refer to the technical data sheet of the screen ink for further information.

Table 1: Retroreflectivity

Typical Values for the coefficient of retroreflection (new sheeting, measured using CIE standard illuminant A, and the provisions of CIE No. 54.2:

Table 1 – Specific coefficient of retroreflection in cd/(lx m ²)				
Observation angle	0.2°		0.33°	
Entrance angle	5°	30°	5°	30°
white (010)	70	30	60	25
yellow (020)	50	21	42	18

Table 2: Colour

Colour specification limits at daylight (new sheeting, measured in accordance with CIE No. 15.2 and EN12899-1):

Table 2 – Colour coordinates									
Colours	1		2		3		4		Luminance factor β
	X	y	X	y	X	y	X	y	
white (010)	0.305	0.315	0.335	0.345	0.325	0.355	0.295	0.325	≥ 0.35
yellow (020)	0.494	0.505	0.470	0.480	0.513	0.437	0.545	0.454	≥ 0.27

Physical and Chemical Properties

Thickness*	0.430 mm
Shelf life**	1 year
Service life by specialist application*** under vertical outdoor exposure	3 years

* average ** in original packaging, at 20° C and 50% relative humidity ***standard central European climate, no warranty for non-vertical applications

IMPORTANT NOTICE

When using ORALITE® sheeting the relevant national specifications have to be complied with. ORAFOL recommends you obtain 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.

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.orafol.com for detailed information.

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