

Description

ORALITE® VC 612RA Flexibright™ Fleet Marking Grade is a tough weather resistant product designed for rugged outdoor use for livery applications on emergency services vehicles. The material is die cuttable and plotter cuttable, and easy to apply onto smooth painted or unpainted vehicle surfaces.

ORALITE® VC 612RA Flexibright™ Fleet Marking Grade is composed of cube corner (microprism) retroreflective elements integrally bonded to a flexible, smooth-surfaced tough and weather resistant UV stabilised polymeric film. The prism surfaces are coated with a vacuum deposition of aluminium to provide a mirror surface to the prism facets. The resulting material is not more than 0,45 mm thick, and comes with a pressure sensitive adhesive. The product is single layer, with no need for edge sealing.

Advantages

ORALITE® VC 612RA Flexibright™ has the following unique features:

Impact Resistance – The product does not delaminate when impacted due to its single layer metallised construction

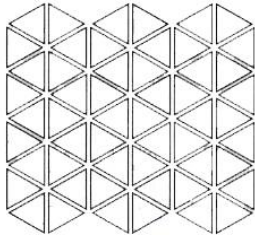
Flexibility – The product is suited for application to flat or curved surfaces (please refer to application instructions)

Repositionability - The product has excellent initial repositionability

Product Approval

- Complies with the regulations in NIT 273:2006
- Homologation French Fire Vehicle Specification: TPESC-B 13223

Film Logo Pattern



Retroreflectivity

Typical values for the coefficient of retroreflection (R') for ORALITE® VC 612RA Flexibright™ are shown in Table 1 and met 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® VC 612RA Flexibright™ Fleet Marking Grade is available in fluorescent lime and red in chevron pattern. The fluorescent lime / red stripes measure 10 cm in width and are at a 45° angle. The colour is located in 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).

Adhesive

The adhesive has been specifically designed to allow for excellent initial repositionability by dry application method. In combination with the *RapidAir*® liner (RA), an application without air inclusion, especially in large scale applications, is quick and easy.

Application Instructions

Material must be applied when the air and surface temperature is between 10° C and 28° C to assure proper adhesive bonding. Surfaces must be cleaned for grease, oil and dirt. Use a clean towel and isopropyl alcohol to wipe the surface before application.

Please go to the ORAFOL website for complete application instructions.

Shelf Life

The sheeting must be used within 1 year from the shipment date. All rolls including partially used rolls should be stored in original packaging, tightly wound. Store in a clean and dry area, away from direct sunlight. Store at 20° C and 50% relative humidity.

Table 1 – Retroreflectivity

Colour	Observation / Entrance Angle					
	0,33° / 5° (β ₂)	0,33° / 20° (β ₁)	0,33° / 30° (β ₂)	1,50° / 5° (β ₂)	1,50° / 20° (β ₁)	1,50° / 30° (β ₂)
Fl. lime	100	50	25	4	2	1
Red	25	17	14	1	0,5	0,5

All values have units of cd/lux/m².

Table 2 - Colour Specification Limits (Daytime)

Colour	Chromaticity Coordinates*									
	1		2		3		4		Y%	
	x	y	x	y	x	y	x	y	Min.	Max.
Fl. lime	0,387	0,610	0,356	0,494	0,398	0,452	0,460	0,540	40	----
Red	0,648	0,351	0,735	0,265	0,629	0,281	0,565	0,346	3	----

*) The four pairs of chromaticity coordinates determine the acceptable chromaticity when measured with standard illuminant D65

Physical and Chemical Properties

Thickness ¹ (without protective paper)	0.45 mm
Temperature resistance	adhered to aluminium, -40° C to +82° C (-40° F to 180° F)
Resistance to cleaning agents adhered to aluminium	8h in solution (0.5% household cleaning agents) at room temperature and 65° C (150° F): no variation
Adhesive power ¹ (FINAT-TM1 after 24h, stainless steel)	>15 N/25 mm (1 inch)
Shelf life ²	1 year
Application temperature	> +15° C
Service life by specialist application ³ under vertical outdoor exposure	5 years

¹ average

² in original packaging, at 20°C and 50% relative humidity

³ standard central European climate

IMPORTANT NOTICE

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.

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