

## Description

ORALITE® GP 350 is a tough weather and solvent resistant tape designed to be sewn or high frequency welded on to high visibility garments. The reflectivity exceeds the highest performance level of EN ISO 20471:2013, and an approved testing laboratory has certified the tapes. The fluorescent lime version is in addition certified to EN ISO 20471:2013 Combined Performance.

## Product Construction

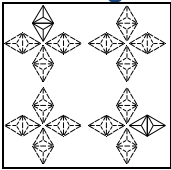
ORALITE® GP 350 is composed of cube corner (microprism) retroreflective elements integrally bonded to a flexible, smooth-surfaced tough and weather resistant UV stabilised polymeric film. The reflective material is welded to a UV stabilised polymeric film to protect the prism surfaces from dirt and moisture.

## Product Approvals

EN ISO 20471:2013  
ISO 14116:2008 Index 1

Test certificates for garment CE mark acquisition are available upon request.

## Film Logo Pattern



## Visual Appearance



## Colour

ORALITE® GP 350 is available in white and fluorescent lime.

ORALITE® GP 350 series tapes conform to the colour requirements in Table 2 when measured in accordance with CIE Publication No. 15.2. The four pairs of coordinates determine the acceptable colour when measured with standard illuminant D65 using a Hunter LabScan.

## Retroreflectivity

ORALITE® GP 350 tapes comply with the minimum reflectivity requirements of EN ISO 20471:2013 separate performance, when tested in accordance with the procedures in EN ISO 20471:2013. *Typical* coefficients of retroreflection for ORALITE® GP 350 are provided in Table 1.

## Care Instructions

ORALITE® GP 350 when washed in accordance with EN ISO 20471:2013 will withstand a minimum of 75 washings at 60° C when attached to a variety of background materials, and a minimum of 50 washings at 60° C followed by testing to ISO 14116 Index 1.



## Application Instructions

Please contact ORAFOL for full instructions.

## Shelf Life

The product must be used within one 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.

## Manufacturers Note

The material may only be used over EN ISO 14116 Index 2 or 3 materials.

**Table 1 - Retroreflectivity – White / Fluorescent Lime**

Observation Angle	Entrance Angle ( $\beta_1, \beta_2=0$ )			
	5°	20°	30°	40°
0,20°	580	450	300	200
0,33°	370	300	200	150
1,00°	100	90	50	40
1,50°	25	20	18	14

All values have units of cd/lux/m<sup>2</sup>.

**Table 2 - Colour Specification Limits**

Colour	Chromaticity Coordinates*							
	1		2		3		4	
	x	y	x	y	x	y	x	y
15 White	0,303	0,300	0,368	0,366	0,340	0,393	0,274	0,329
20 Fl. lime	0,387	0,610	0,356	0,494	0,398	0,452	0,460	0,540

\* The four pairs of chromaticity coordinates determine the acceptable chromaticity on the CIE diagram.

The minimum luminance data is required for combined fluorescent performance tapes only.

## IMPORTANT NOTE

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The durability of the end product depends upon a variety of factors, including but not limited to substrate selection and preparation, compliance with the recommended application guidelines, geographical area, exposure conditions and maintenance of the ORAFOL material and of the end product. Product defects caused by the substrate or improper surface preparation do not lie within ORAFOL's sphere of responsibility.

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