# ORALITE® GP 340 Imagine

# **Description**

ORALITE® GP 340 Imagine 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 340 Imagine 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

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

## Film Logo Pattern



# Visual Appearance



#### Colour

ORALITE® GP 340 Imagine is available with the reflective film in white, fluorescent lime, and orange. Colour shades are constructed by using 7 possible coloured backing materials. 21 colour combinations are available and all conform to EN ISO 20471:2013. ORALITE® GP 340 Imagine is customised by embossing an image / logo into the tape for every 18 cm.

ORALITE® GP 340 Imagine conforms 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 340 Imagine 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 340 Imagine are provided in Table 1 and Table 2.

Note: The final coefficient of retroreflection will depend upon the size of the embossed logo.

### Care Instructions

ORALITE® GP 340 Imagine when washed in accordance with EN ISO 20471:2013 will withstand a minimum of 100 washings at 60° C when attached to a variety of background materials.







## **Application Instructions**

Please contact ORAFOL for full instructions.



# ORALITE® GP 340 Imagine

## **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.

Table 1 - Retroreflectivity, white / fluorescent lime

Observation Angle	Entrance Angle (β1, β2=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 - Retroreflectivity, orange

Observation —	Entrance Angle (β <sub>1</sub> , β <sub>2</sub> =0)					
Angle	5°	20°	30°	40°		
0,20°	400	315	210	140		
0,33°	280	240	180	100		
1,00°	70	60	35	25		
1,50°	16	14	12	8		

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

Table 3 - Colour Specification Limits

	Chromaticity Coordinates*							
Colour	1		2		3		4	
	X	у	X	у	х	у	х	у
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
07 Orange	0,558	0,352	0,636	0,364	0,570	0,429	0,506	0,404

<sup>\*</sup> The four pairs of chromaticity coordinates determine the acceptable chromaticity on the CIE diagram.

## **IMPORTANT NOTE**

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