ORALITE® GP 090G

Description
ORALITE® GP 090G is a soft, flexible sew-on glass bead microsphere reflective garment tape, designed for use in industrial wash applications. ORALITE® GP 090G exceeds the minimum photometric requirements of EN ISO 20471:2013+A1:2016, ANSI/ISEA 107-2010 (Level 2) and AS/NZS 1906.4:2010 Class R.

Product Construction
ORALITE® GP 090G is composed of wide-angle, exposed retroreflective lenses bonded to a sewable fabric backing. The backing is made of woven recycled polyester from post-consumer PET bottles. The total recycled content is between 20-60%.

Product Approvals
EN ISO 20471:2013+A1:2016 Separate Performance

Colour
ORALITE® GP 090G is available in silver (daytime appearance) with a white reflected colour.

Retroreflectivity
ORALITE® GP 090G complies with the minimum reflectivity requirements of EN ISO 20471:2013+A1:2016 separate performance, ANSI/ISEA 107-2010 and AS/NZS 1906.4:2010 Class R, when tested in accordance with the relevant procedures. Typical coefficients of retroreflection are shown in Table 1.

Care Instructions
When attached to a variety of background materials, ORALITE® GP 090G will withstand a minimum of

- 100 wash cycles according to ISO 6330:2012 Method 6N (60°C)
- 75 cycles when washed in accordance with ISO 15797:2017 Table 4_2 at 75°C and dried in a tumble dryer at 90°C
- 50 cycles when washed in accordance with ISO 15797:2017 Table 4_2 at 75°C and dried in a tunnel dryer at 155°C.

Dry Cleaning
ISO 3175-2:2018 normal cycle (perchloroethylene) – 100 cycles.

Application Instructions
ORALITE® GP 090G has a single layer construction which allows for stitching in any area of the surface. A stitch count of 8 stitches per 2,54 cm is recommended. The stitching should be at least 2 mm from the edge of the garment tape.

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

Observation Angle	Entrance Angle (β_1, β_2=0)			
	5°	**20°**	**30°**	**40°**
0,20° (12')	500	290	180	65
0,33° (20')	250	200	170	60
1,00° (1°)	25	15	12	10
1,50° (1°30')	10	7	5	4

All values have units of cd/lux/m^2.

IMPORTANT NOTE

All ORAFOL products are subject to careful quality control throughout the entire manufacturing process, and it is ensured that they are of merchantable quality and free from manufacturing defects. The information published is based on our analyses and studies and does not constitute any warranted properties or any agreement as to quality. Due to the diverse possibilities of use of ORAFOL products and the constant development of new applications, the buyer should carefully consider the suitability and performance of the product for the respective purpose; it bears all risks associated with such use. No warranty is given for purposes other than those listed in the Technical Data Sheet or for applications that are not processed in accordance with ORAFOL's processing instructions.

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.

When using ORAFOL products, the pertinent national regulations are to be observed. ORAFOL recommends that you obtain the current stipulations from your local authority and ensure that the product meets these requirements. Please contact ORAFOL for further information.