

Description

ORALITE® GP 801FR is a tough weather and solvent resistant tape for sewing on to high visibility garments and designed for functional use working in areas where heat and flame resistance are required. The reflectivity exceeds the highest performance level of EN ISO 20471:2013.

Product Construction

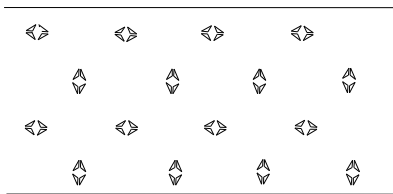
ORALITE® GP 801FR is composed of cube corner (microprism) retroreflective elements integrally bonded to a flexible, smooth-surfaced tough and weather resistant UV stabilised polymeric film. The prism surfaces are metallised to provide a mirror surface to the prism facets. The product comes with a flame-resistant fabric backing to facilitate sewing.

Product Approvals

- EN ISO 20471:2013/A1 – High-visibility warning clothing
- EN 469:2005+A1:2016 – Protective clothing for firefighting
- EN ISO 11611:2015 – Protective clothing for use in welding and allied processes
- EN ISO 11612:2015 – Clothing to protect against heat and flame
- EN ISO 14116:2015 – Clothing to protect against heat and flame. Limited flame spread materials, material assemblies and clothing.
- EN ISO 15614:2007 – Protective clothing for firefighters – Laboratory test methods and performance requirements for wildland clothing

Test certificates for garment CE mark acquisition are available upon request

Film Logo Pattern



Colour

ORALITE® GP 801FR is available in silver. ORALITE® GP 801FR tape 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 801FR 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 801FR are provided in Table 1.

Flame Resistance

ORALITE® GP 801FR meets the requirements of EN 469:2005 Clause 6.1 and 6.5 and EN 14116:2015 Index 3 in new condition and after 50 washing cycles at 60°C.

Thermal Resistance

ORALITE® GP 801FR exceeds the photometric requirements of EN ISO 20471:2013 after convective heat exposure at 180°C for 5 minutes when new (EN 469:2005 Annex B.3.1) and also exceeds the photometric requirements after 50 washing cycles (according to ISO:6330 Method 6N) and convective heat exposure at 180° C for 5 minutes.

Machine Washing

When washed for 100 cycles in accordance with ISO-6330 Method 6N (60° C home wash) and tumble dried, GP 801 FR shall maintain a minimum reflectivity of 100 cd/lux/m² or greater when measured as described above.

Care Instructions

ORALITE® GP 801FR is a functional tape resistant to dirt, oil and water that can easily be cleaned due to its product construction. The protective properties are maintained after being used and cleaned. The product is not suited for dry cleaning.



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.

Table 1
Retroreflectivity

Observation Angle	Entrance Angle ($\beta_1, \beta_2=0$)			
	5°	20°	30°	40°
0,20°	1000	700	500	250
0,33°	500	400	300	200
1,00°	35	33	30	20
1,50°	10	10	10	8

All values have units of cd/lux/m².

Table 2
Colour Specification Limits

Colour	Chromaticity Coordinates*							
	1		2		3		4	
	x	y	x	y	x	y	x	y
15 Silver	0,303	0,300	0,368	0,366	0,340	0,393	0,274	0,329

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

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.

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