

## Description

ORALITE® FTP 300 is a soft, flexible, fluorescent lime backed tape, with a glass bead, retroreflective central strip. ORALITE® FTP 300 is designed for sew-on application to fire fighter workwear, as it offers instant recognition in today's demanding fire-fighting conditions. The tape is available with a full width of 50 mm or 75 mm.

## Product Construction

ORALITE® FTP 300 is composed of a fluorescent lime 100% cotton sewable fabric, with a central strip of wide-angle, exposed retroreflective lenses.

## Product Approval

The central glass bead strip exceeds the requirements of EN ISO 20471:2013 in its own right, when supplied as a 50 mm tape. However, ORALITE® FTP 300 cannot be used to certify garments to EN ISO 20471:2013, as the reflective part does not meet the minimum 50 mm width. The backing meets the requirements for fluorescent lime background material when new (clause 5.1), after being subjected to convective heat testing at 180° C for 5 minutes. The background also meets the requirements for fluorescent lime background material (clause 5.1) after being subjected to 40 cycles washing at 60° C per EN ISO 20471:2013 or after 25 cycles at 90°C per EN ISO 20471:2013 or after 25 cycles dry cleaning per EN ISO 20471:2013.

The central strip provides limited flame spread properties according to EN 469:2005 and is also approved to EN 533 (Index 3).

## Visual Appearance



## Colour

ORALITE® FTP 300 is available in a fluorescent lime backing material with a silver glass bead (daytime appearance) central strip. The silver central glass bead strip reflects light in a white colour under dark conditions. The tape offers instant recognition in day time and low light conditions. In dark conditions, the reflective component increases the visibility of the wearer.

## Retroreflectivity

ORALITE® FTP 300 central (silver) strip, exceeds the minimum reflectivity requirements of EN ISO 20471:2013, when tested at  $e = 0^\circ$  or  $e = 90^\circ$  in accordance with the procedures in EN ISO 20471:2013. Minimum coefficients of retroreflection are shown in Table 1. The tape is not orientation sensitive.

## Flame Resistance

The glass bead element meets the requirements of EN 469:2005 Clause 6.1 and 6.5 and EN 14116:2008 Index 3.

## Machine Washing

ISO 6330:2000, Method 2A – 40 washes at 60° C.

## Dry Cleaning

ISO 3175:1998, Method 9.1 – 25 cycles.

## Application Instructions

ORALITE® FTP 300 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 of glass bead strip**

Observation Angle	Entrance Angle ( $\beta_1, \beta_2=0$ )			
	5°	20°	30°	40°
<b>0,20° (12')</b>	330	290	180	65
<b>0,33° (20')</b>	250	200	170	60
<b>1,00° (1°)</b>	25	15	12	10
<b>1,50° (1°30')</b>	10	7	5	4

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

## 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.

ORALITE® is a registered trademark of ORAFOL Europe GmbH.