

## Description

ORALITE® FTP 1200 Advanced has been designed to meet or exceed the requirements of EN 469:2005 Protective Clothing for Fire-Fighters and EN ISO 20471:2013 High Visibility Warning Clothing, offering superior reflectivity and durability under today's most demanding fire-fighting conditions.

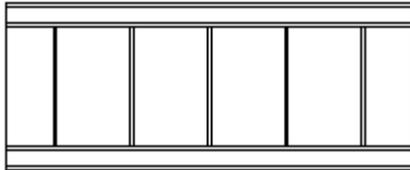
## Product Construction

ORALITE® FTP 1200 Advanced is composed of cube corner (microprism) retroreflective elements integrally bonded to a flexible, smooth-surfaced tough and weather resistant UV stabilised polymeric film. The microprismatic sheeting is bonded to a flame and heat resistant fabric reinforced polymeric backing, which protects the prisms from dirt and moisture and allows for sewing applications.

## Product Approvals

The product is fully compliant with specifications:  
EN 469:2005, EN ISO 15614:2007, ISO 16073:2011  
EN ISO 20471:2013  
EN ISO 14116:2008 Index 3  
EN 50354:2002 – Electrical Arc Testing Class 1

## Film Logo Pattern



## Colour

ORALITE® FTP 1200 Advanced is available in fluorescent lime, offering both superior daytime visibility through fluorescence, as well as outstanding nighttime visibility through reflected colour similar to that of its daytime appearance.

## Combined Performance

ORALITE® FTP 1200 Advanced meets the requirements of fluorescent yellow background material, EN ISO 20471:2013, and has been designed to be used as a combined performance tape.

## Retroreflectivity

ORALITE® FTP 1200 Advanced can be used on EN ISO 20471:2013 high visibility garments, and exceeds the minimum reflectivity requirements of EN ISO 20471:2013 separate performance when tested in accordance with the procedures in EN ISO 20471. The tape has a typical retroreflective value of 450 cd/lux/m<sup>2</sup> when measured at 0,2° / 5° geometry.

## Flame Resistance

ORALITE® FTP 1200 Advanced meets the requirements of EN 469:2005 clause 6.1 and EN ISO 14116:2008 index 3 when tested in accordance with ISO 15025 Method A (EN 532).

## Thermal Resistance

ORALITE® FTP 1200 Advanced 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 5 washing cycles (according to ISO:6330 Method 2A) and convective heat exposure at 180° C for 5 minutes.

## Chemical Exposure Resistance

ORALITE® FTP 1200 Advanced offers resistance to some chemicals potentially encountered in fire-fighting situations, and is able to withstand many acids and caustic materials without evidence of blistering or dissolving.

## Care Instructions

ORALITE® FTP 1200 Advanced when washed in accordance with EN ISO 20471:2013 will withstand a minimum of 30 washings at 60° C when attached to a variety of background materials.



## Application Instructions

Please contact ORAFOL for full instructions.

## Shelf Life

The material 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.

## Note

Dyes may migrate when placed in direct contact with vinyl and some fabrics. Prior to application, ORALITE® FTP 1200 Advanced must be kept separate and should be tested for dye migration. It is the responsibility of the user to evaluate the appropriateness of the material for their application.

**Table 1 - Retroreflectivity**

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

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