

1.0 General Information

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 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 EN ISO 14116 (Index 3).

For more information on the retroreflectivity of ORALITE® FTP 300, please reference the relevant technical product bulletins. These are available from your ORAFOL representative or they can be downloaded at www.orafol.com. We suggest the following measures are taken to achieve the optimum performance from the tapes.

2.0 Application - Sewing to Garment Background Fabric

ORALITE® FTP 300 should be sewn onto high visibility garments.

- Sewing Machine Settings** – Recommended stitches per inch is 8 (eight). Reduce pressure on the machine foot. A Teflon coated pressure foot can also help with sewing.
- Background fabric** – Whilst ORAFOL has carried out compatibility checks to most of the readily available background fabrics, we cannot give an open guarantee that the chosen background fabric is fully compatible. Please check with the manufacturer of the fabric before use. The thread must be able to withstand the same wash and wear conditions as the material it is being applied to.
- General** – Do not stretch the tape as it is being applied. At the cut ends of the tape we recommend that the tape is turned under itself and sewn through the doubled over edge. Where possible within the design of the garment the cut ends should be inside the seams of the garment.
- Sewing border** – There is no defined sewing border on these tapes but we recommend sewing at 2 – 3 mm from the edge of the tape.

3.0 Care Instructions – General Information












	Machine wash hot, not greater than 60°C		Non chlorine bleach when needed		Tumble dry, normal, low heat
	Do not steam		Dry clean, any solvent except trichloroethylene		Do not dry clean

Table 1: Overview of Care Instructions

PRODUCT	RECOMMENDED CARE SYMBOLS	WASH TEMPERATURE	APPROVAL
ORALITE® FTP 300	    	40 cycles at 60° C	ISO 6330:2012, Method 6N

ORALITE® FTP 300 washes as well at lower temperatures as it does at higher temperatures. Therefore select the lowest washing temperature that will ensure adequate cleaning of the fabric. This will allow environmentally friendly washing and will extend the life of the garment.

3.1 Hand Washing

Hand washing can be done with a sponge, a soft fabric cloth or a soft brush with lukewarm water and a mild detergent. After washing, the tape must be rinsed with clean water. Stubborn stains such as grease or tar may be spot cleaned with petrol, alcohol, naphtha or turpentine. After spot cleaning the tape must be hand washed as above and rinsed with water.

3.2 Household Washing

Washing Machine	Standard household washing machine
Temperature	30° C to 60° C
Detergent	Standard household detergent, which contains oxygen bleach to reduce staining with Hi-Vis garments.
Setting	“Coloured clothing without pre-wash”

Maximum washing time on the highest temperature should not exceed 12 minutes.

Maximum total washing time should not exceed 50 minutes.

If ORALITE® glass bead tapes are used on fabrics that outbleed (run) easily; we recommend conducting the first two washes at 40° C. This can prevent colour staining.

3.3 Bleaching

Only use non-chlorine bleach when needed.

3.4 Drying

Household tumble dryer, normal, low heat.
Dry to “slightly humid”. DO NOT OVER DRY.
Maximum exhaust temperature shall not exceed 80° C.
For extended life, the garment should be turned inside out before drying.

3.5 Chemical cleaning / dry cleaning

25 cycles, ISO 3175:2010, Method 9.1

3.6 Ironing

Do not use steam.
Use a cool or warm temperature setting.
Avoid direct contact of the tape when ironing, use a press cloth.

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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