

General Information

ORALITE® GP 900 Series is a tough weather and solvent resistant tape designed to be sewn on to high visibility garments, for use in industrial laundering processes up to 75° C with tumble drying.

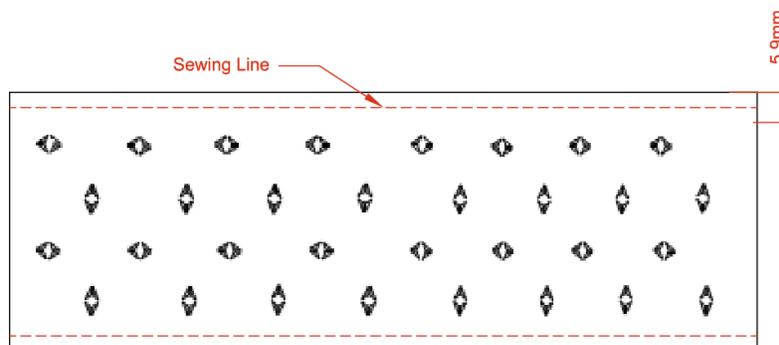
For more information on the *retroreflectivity* of ORALITE® GP 900 Series, please reference the relevant technical data sheet. These are available from your ORAFOL representative or they can be downloaded at www.orafol.com.

We suggest the following measures are taken to achieve the optimum performance from the tapes.

Application - Sewing to Garment Background Fabric

ORALITE® GP 900 Series tapes should be sewn onto high visibility garments.

1. **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.
2. **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.
3. **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.
4. **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.



Care Instructions - General Information Symbols explained

	Do not bleach		Only non-chlorine bleach when needed		Tumble dry, normal, low-heat		Use cool or warm iron temperature setting. Do not use steam.		Do not dry clean
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Table 2: Overview of Care Instructions

PRODUCT	RECOMMENDED CARE SYMBOLS	WASH TEMPERATURE	APPROVAL
ORALITE® GP 900 Series	      *	50 wash cycles at 75° C + tumble drying at 90° C	ISO 15797:2017 Method 1.2 & 4.2

*ISO 15797 Symbols relate to the 2002 version of the standard.

ORALITE® products clean as well at lower temperatures as they do 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. Variations in environmental conditions, as well as the chosen care process, may affect the life of your garment.

ORALITE® GP 900 Series tapes exceed all the requirements of specification EN ISO 20471:2013 separate performance and are certified per ISO 15797.

Regular inspection of the garment performance against the requirements of EN ISO 20471:2013 is recommended. Information included in the care label should be verified to ensure that the reflective material maintains compliance with EN ISO 20471:2013.

Industrial Washing

Note!

ORALITE® GP 900 Series is certified to ISO15797 Method 1.2 & Method 4.2 as detailed above. Washing process, drying process and detergent selection changes can significantly change the wash durability of the reflective tape. It is important that these parameters are evaluated for each application, and it remains the responsibility of the user to test their specific conditions to assess durability.

ISO Industrial wash standards such as ISO 15797, are not always practical for end user implementation. For this reason, ORAFOL has performed practical wash testing using the Ecolab Performance Industrial Process* with ORALITE GP 900 Series tapes and has found comparable tape performance and longevity using this process when compared to the ISO processes. The Ecolab Performance Industrial Process uses the following guidelines;

Washing Machine	Standard front-loading industrial washing machine. Tunnel washing is not recommended.
Temperature	Initial wash for 10 minutes at 55° C followed by main wash at a wash temperature of 60-70° C for 15 minutes. The tape will handle higher temperatures but that will reduce the life of the tape/garment.
Detergent	Ecolab Performance Emulsion and Performance booster E, at the recommended dosages and intervals. Low- to medium- alkaline, high-surfactant detergents are advised. The detergent should not contain free sodium hydroxide or potassium hydroxide.

Detergent pH	The Ecolab Performance Industrial Process achieves a pH less than 11 when used with the above detergents in the correct dosage. Aggressive detergents with high pH values (>11) and high dosage will reduce product performance over the lifetime of the application. Please check the detergent Material Safety Data Sheet (MSDS) for the pH value and choose detergents with pH values less than 11 in order to increase the product lifetime.
Drying	Tumble dry only. Maximum exhaust temperature shall not exceed 90° C. Dry to "slightly humid". Do not over dry.

Please contact ORAFOL Technical Support for additional information.

*Ecolab Performance Industrial Process is subject to change and it remains the responsibility of the user to test their specific conditions to assess durability.

Caution!

- Do not pre-soak
- Do not use high alkaline products (such as heavy duty products or stain removal products)
- Do not use solvenated detergents or micro-emulsions
- Do not use additional bleaches
- Rinse thoroughly in order to completely remove all detergent residues.

Tape longevity can be improved by:

- Using lower temperatures
- Limiting abrasion in the wash process
- Not pre-soaking with detergent
- Lower pH detergents (more towards neutral)
- Using acid let-down/rinse

Household Washing

Washer: Standard household washing machine
Temperature: Maximum wash temperature shall not exceed 75° C
Detergent: Standard household detergent, which contains oxygen bleach to reduce staining with Hi-Vis garments.
Setting: "Coloured clothing without pre-wash"

Caution!

- Maximum washing time on highest temperature not to exceed 12 minutes.
- Maximum total washing time not to exceed 50 minutes.
- If ORALITE® GP 900 Series is used on easy outbleeding fabrics, it is recommended to conduct the first two washes at 40° C. This can prevent colour staining.

Bleaching

Only non-chlorine bleach when needed.

Chemical Cleaning / Dry Cleaning

Do not dry clean.

Ironing

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

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.



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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