

This document applies to ORALITE® industrial wash glass bead tapes (garment trims) for sewing application. These instructions do not apply to ORALITE® industrial wash glass bead tapes for heat application. Products covered in this document:

- ORALITE® GP 090
- ORALITE® GP 095

## 1.0 General Information

ORALITE® industrial wash glass bead tapes for sewing application are flexible, weather-resistant tapes designed for use on high visibility garments. They are to be sewn to suitable background fabrics and they exceed the photometric requirements of EN ISO 20471:2013. For more information on the retroreflectivity of ORALITE® industrial wash glass bead tapes for sewing application, please reference the relevant technical product bulletin. These are available from your ORAFOL representative or they can be downloaded at [www.orafol.com](http://www.orafol.com).

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





### 1.1 Application - Sewing to Garment Background Fabric

ORALITE® industrial wash glass bead tapes for sewing application 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.

## 2.0 Care Instructions – General Information

### Symbols explained

	Tumble dry, normal, medium heat		Iron, low		Dry clean, any solvent except trichloroethylene		Industrial wash
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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 letdown/rinse

## Note!

ORALITE® industrial wash glass bead tapes for sewing application are certified to ISO15797 Method 8 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.

## Household Washing

Washing Machine            Standard household washing machine

Temperature                Maximum wash temperature certified is 75° C. The tape will handle higher temperatures but those will reduce the life of the tape/garment.

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 highest temperature should not exceed 12 minutes.  
Maximum total washing time should not exceed 50 minutes.

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

## Bleaching

Only use non-chlorine bleach when needed.

## Drying

### Tumble dry

Maximum temperature shall not exceed 90° C.  
Dry to “slightly humid”. Do not over dry.  
For extended life, the garment should be turned inside out before drying.

### Tunnel dry

Maximum inlet temperature shall not exceed 155° C.  
The drying time should not exceed 6 minutes.  
Limited abrasion tunnel dry is recommended.

## 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.

## IMPORTANT NOTICE

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