

## General Information

ORALITE® GP 095 is a soft, flexible sew-on glass bead tape designed for application to fire fighting garments and flame resistant work wear and is suited for use in industrial wash applications. ORALITE® GP 095 exceeds all the requirements of specification EN ISO 20471:2013 separate performance and is certified per ISO 15797 method 8 as follows:

- 35 wash cycles at 75° C + tumble drying at 90° C
- 35 wash cycles at 75° C + tunnel drying at 155° C inlet temperature

In addition the product is certified per ISO 15797 method 2 as follows;

- 50 wash cycles at 75° C + tumble drying at 90° C
- 50 wash cycles at 75° C + tunnel drying at 155° C inlet temperature

ORALITE® GP 095, when washed in accordance with ISO 6330:2012 Method 6N, will withstand a minimum of 50 washings at 60° C and when washed in accordance with ISO 6330:2012 Method 9N will withstand a minimum of 25 washings at 92° C when attached to a variety of background materials.

ORALITE® GP 095 cleans as well at lower temperature 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.

Variations in environmental conditions as well as chosen care process may affect the life of your garment. 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.

## 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.

## Industrial Washing

**Washer:** Standard front-loading industrial washing machine. Tunnel washing is not recommended.

**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:** Low- to medium- alkaline, high-surfactant detergents. The detergent should not contain free sodium hydroxide or potassium hydroxide and its pH-value should not exceed 11. Use of a lower pH will extend the life of the tape.

## 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
- Limited abrasion in the wash process
- No pre-soaking with detergent
- Using acid letdown/rinse

**Note!**

ORALITE® GP 095 is 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 washing conditions to assess durability for the stated maximum wash cycles indicated on the care label.

**Household Washing**

Washer: Standard household washing machine

Temperature: 30° C - 92° 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 095 is used on easily 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.

**Drying****Tumble dry**

Maximum temperature shall not exceed 90° C.

Dry to "slightly humid". Do not over dry.

For extended life, 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**

If dry cleaning is needed, professional dry cleaning in perchloroethylene and hydrocarbons (distillation temperature between 150° C and 210° C, flash point between 38° C and 70° C), normal process.

**Ironing**

Do not use steam.

Use a cool or warm temperature setting.

Avoid direct contact of the tape when ironing, use a press cloth.

## Application Instructions

### Sewing to Garment Background Fabric – Sewing Machine Settings

ORALITE® GP 095 may be sewn onto garments using a flame retardant thread. The product is a single layer construction which allows for stitching in any area of the surface. The stitching should be at least 3 mm from the edge of the garment tape. A stitch count of 8-10 stitches per 25 mm is recommended.

We recommend taking the following measures if the tape binds when being sewn:

1. Reduce pressure on the machine foot
2. Use a teflon coated pressure foot, if necessary
3. Use of a silicone spray or silicon coated cloth will help to lubricate the surface of the tape.

### Background Fabric

Compatibility checks with many readily available background fabrics have been performed. We cannot give an open guarantee that the chosen background fabric is fully compatible please check with the manufacturer of the fabric before use.

### Note

Do not stretch the tape as it is being applied. It is recommended that the tape is turned under and sewn through the doubled over edge. This helps prevent moisture ingress. Where possible within the design of the garment the cut ends should be inside the seams of the garment

## 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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