

Technical Sheet

YSL VizLite™ 310

Flame Retardant Fluorescent Yellow Reflective Material



Product Information

YSL VizLite™ 310 Flame Retardant Reflective Material is intended for use on Flame retardant PPE clothing such as Fire Fighting clothing to enhance visibility in low light and night time conditions and to meet the requirement for heat resistance and limited flame spread.

Design Features

The fabric is constructed of a layer of microscopic clear glass beads bonded onto a 100% cotton backing with a Proban treatment.

When a beam of light from an oncoming vehicle meets the material, the light reflects back to the light source and enhances the visibility of the wearer to the vehicle driver.

Product Performance and Certification

YSL VizLite™ 310 Flame Retardant Reflective Material is certified by Centro Tessile Cottoniero e Abbigliamento Laboratory in Italy (Notification Body n. 0624) and complies with the following standards;

EN471:2003 + A1:2007 High visibility warning clothing for professional use for the following requirements:

- Colour performance requirements for new material
- Colour after xenon test
- Retro reflective performance requirements of new material with combined performance
- Retro reflective performance after abrasion, flexing, folding at cold temperatures, exposure to temperature variation, washing (25 cycles at 60° C), dry cleaning (25 cycles) and influence of rainfall.

EN469:2005 + A1:2006 Protective clothing for firefighting for the following requirements:

- Retro reflective performance requirements (after 25 cycles at 60°C)
- Retro reflective performance requirements after resistance to heat (180°C)
- Limited flame spread (after and before 25 cycles washing at 60°C)

EN ISO 14116 : 2008—Clothing to protect against heat and flame. Limited flame spread materials, material assemblies and clothing for the following requirements:

- Limited flame spread—Procedure A—Surface ignition (index 3 before and after 25 cycles washing 60°C—final index 3/25H/60)

Product Application

YSL VizLite™ 310 Fabric is recommended for use on garments that require flame and heat resistance such as Fire fighting clothing, Turn out gear, Trousers, boiler suits and flame resistant PPE.

YSL VizLite™ 310 Fabric meets the requirements of EN471:2003 or ANSI/ISEA for combined performance and is recommended for use in High Visibility garments as an additional trim alongside the specified amount of compliant VizLite™ 301 Fire Retardant Silver Material.

YSL VizLite™ 310 Fabric is not recommended for use in heavy wear environments and is not suitable for industrial laundry.



Viz Reflectives

Technical Sheet

YSL VizLite™ 310

Flame Retardant Fluorescent Yellow Reflective Material



Product Usage

Cutting

- Suitable for cutting by hand (using very sharp cutting tools) or by guillotine.
- Cuts should be made from the reflective surface.

Recommended Fabrics

- Flame Retardant Fabrics e.g. Nomex™, Aramid
- Not suitable for stretchy fabrics such as Lycra or those containing Lycra as results can be poor.
- All substrate materials should be chosen based on suitability for intended use and laundry properties.

Sewing

- YSL VizLite™ 310 Fabric can be applied direct to fabric panels before a garment is sewn together.
- Stitching should be at a distance of 2mm from the edge of reflective material to avoid fraying or curling of the reflective material.
- Where separate pieces of material meet on a garment care should be taken to match the visible appearance.

Stitching

- A double lock stitch with a maximum 5 stitches per cm is recommended.
- For substrates up to 250g/m² needle size NM80 -90 is recommended. For substrates greater than 250g/m² a larger needle size would be required.
- A Teflon™ coated needle and Pressure foot is recommended to enable a smooth fabric transition.
- Thread tension should be kept to a minimum.
- Tension on both upper and lower threads must be matched to ensure there is no puckering.

- Thread should be matched to the substrate i.e. Flame retardant. All threads should be shrink proof and be suitable for sewing at higher speeds.
- The guide on 2-Needle machines should be set at 2-3 mm above the width of the reflective fabric. This will decrease the chance of Puckering caused by a difference in tension between the YSL VizLite™ 310 fabric and the substrate.

Storage and shipping

- Rolls should be stored in the packaging they are supplied in.
- Cut pieces should be stored flat
- Opened rolls should either be stored in their original packaging or suspended by the use of a rod through the middle of the roll.
- YSL VizLite™ 310 fabric should be stored in an area that is cool, dry and with low humidity.
- Precautions should be taken to protect the material from coming into contact with perspiration, strong acids, or compounds containing high levels of sulphur or chlorine. Contamination by these substances may affect the aesthetic appearance of the YSL VizLite™ 310 fabric.
- During Transportation and Shipping it is best to keep an ambient condition.

Handling

- YSL VizLite™ 310 fabric should be handled carefully in hot and humid conditions.
- The area in which the materials are handled may need the need of cooling or dehumidifying equipment to keep the area cool and dry.
- Avoid the contamination of the product with dirt, grease or solvents as this could produce staining that will affect the quality of the fabric.



Technical Sheet

YSL VizLite™ 310

Flame Retardant Fluorescent Yellow Reflective Material



Wash and Care

YSL VizLite™ 310 fabric is designed to be washed at 60°C in a Domestic wash, up to a minimum 25 cycles before the retro-reflective qualities are affected. However the following washing instructions should be closely followed;

- Do not pre-soak
- Do not use a pre-wash program
- Recommended wash program is for coloured clothing wash
- Do not wash at a higher temperature than 60°C
- Recommended wash Temperature is 30-60°C
- Maximum Program time 50 minutes
- Maximum wash time at highest wash temperature 12 minutes
- Domestic washing powders for delicate and coloured fabrics are recommended

Stain removal

- YSL VizLite™ 310 material should be tested for wash conditions before using the material. This can be achieved by mixing a solution of detergent and water and applying with a sponge or cloth to the material. For stain removal of grease or mineral oils, use a clean cloth dipped into white spirits. Wipe clean with water afterwards.
- Chemical splashes should be removed with a clean dry cloth.
- Neutralise splashes of strong acid or alkalise immediately with plenty of clean water
- Dispose any material that comes into contact with toxic or harmful substances in a safe and responsible manner.

Do not use the following types of products to clean/ treat stains on this garment;

- Heavy duty products or stain removal products with a high alkaline content.
- Micro-emulsions or high ph-products
- Bleaches
- Aromatic solvents

The use of the above will affect the lifespan of the retro-reflective material.

Ironing

- Iron on reverse of material if possible
- Iron using medium heat setting
- Do not use steam

Specialist cleaning and dry cleaning

- The YSL VizLite™ 310 material is not suitable for Industrial laundry methods.
- The YSL VizLite™ 310 material is suitable for dry cleaning upto 25 cycles.

Drying

- Line drying is the preferred method of drying
- Do not dry in conditions exceeding 70° C



Viz Reflectives

Technical Sheet

YSL VizLite™ 310

Flame Retardant Fluorescent Yellow Reflective Material



Maintenance issues

The YSL VizLite™ 310 fabric retro-reflective properties will be affected by any of the following treatments;

- Coating or Spraying the garment with oils, protective waxes, paints or inks.
- Application of products such as leather spray or waxes.
- Harsh physical application of abrasive wire brushes or sand paper.

Product Disposal

The YSL VizLite™ 310 fabric can be disposed of on the garment. The product can be incinerated in a commercial or industrial facility or sent to a landfill site.

General Safety Information

Visibility Limits of YSL VizLite™ 310 fabrics

There are various uncontrollable environmental factors that will affect visibility; these include smoke, hail, snow, mist, dust and fog. Fog, smoke, mist, and dust can all affect the dispersal of light from headlights and retro-reflective performance.

Important notice to Purchaser / Converter / Wearer

Because of the unlimited variety of potential applications for products, BEFORE product use the converter and/ or product manufacturer must determine that the products are suitable for the intended use and are compatible with other component materials. The Purchaser is solely responsible for determining the proper amount and placement of products. While reflective products enhance visibility, no reflective product can ensure visibility on safety under all possible conditions.

Neither Viz Reflectives or any Viz Reflectives authorised converter shall be liable for any incidental, special or consequential damages relating to the use or inability to use the products regardless of legal theory used.

