



**DESCRIPTION**

Reflective fabric SPE05.GR50AFP is composed of micro-glass beads bonded to a 100% **FR treated cotton fabric backing**. It reflects light directly to the original light source and enhances the visibility of anyone who wears it. The “AFP” perforated version is softer and improves breathability reducing risk of water vapor burning under extreme heat.

**REFLECTIVE PERFORMANCE**

The reflective coefficient (R, in cd/lux/m<sup>2</sup>) can meet the requirements in international standards like EN ISO 20471, ANSI/ISEA 107, CSA-Z96-15, AS/NZS 1906.

Observation angle	Entrance angle	Minimum reflectivity	Typical reflectivity
5°	12'	330	>330

**WASH PERFORMANCE**

Product No.	Home Wash Cycles <sup>1</sup>	Dry cleaning Cycles <sup>2</sup>
SPE05.AG50AFP	>30	>30

1. ISO 6330 Method 2A at 60 °C (140 °F) and R<sub>A</sub> ≥ 100 cd/lux/m<sup>2</sup> (home wash)

2. ISO 3175 Method 8.1 and R<sub>A</sub> ≥ 100 cd/lux/m<sup>2</sup>

3. Above reflective data only refer to the silver portion

**COLOR**

Product No.	Daytime Color	Reflected Color
SPE05.AG50AFP	Yellow Silver Yellow	White

**PHYSICAL PERFORMANCE**

After the following each exposure testing, SPE05.AG50AFP R<sub>A</sub> values are above 100 cd/lux/m<sup>2</sup> at +5.0° entrance angle and 0.2° observation angle.

Physical performance	Test method
Abrasion	EN 530 Method 2, 5000 cycles
Flexing	ISO 7854 Method A, 7500 cycles
Cold Fold	ISO 4675, -20 °C (-4 °F)
Temperature Cycle	12 hours @ 50 °C (122 °F); 20 hours @ -30 °C (-22 °F)
Wash	ISO 6330 Method 2A @ 60°C (140°F) number of cycles listed
Dry-Clean	ISO 3175 Method 9.1 number of cycles listed
Wet Reflectivity	Flow rate @ 284 mm/h for at least 2 mins
Flame resistance	ASTM D 6413, 4" char length
Heat resistance	ISO 17493, 5 minutes @ 260 °C (500 °F)



**CERTIFICATION**

SPE05.AG50AFP yellow Silver yellow flame resistant reflective fabric meets the requirements in below listed standards for high visibility garments.

Product No.	EN ISO 20471 ANSI/ISEA 107 CSA-Z96-15 AS/NZS 1906	EN 469 EN ISO 14116 EN ISO 11612 NFPA 2112
SPE05.AG50AFP	√	√

**APPLICATION INSTRUCTIONS**

**Cutting:** Die-cutting is recommended, although it can also be hand-cut or guillotined.

**Sewing:** Sew in place using a lockstitch with no more than 12 stitches per inch (2.54 cm), and not less than 5/64" (2 mm) from the edge of the reflective fabric. For best results, apply to light and medium weight fabrics.

**CARE AND MAINTENANCE INSTRUCTIONS**

Actual life of SPE05.AG50AFP fabric trim depends on cleaning method and wear conditions.



Do not presoak Machine wash warm, 40°C (105°F)



Cool iron, Do not exceed 120°C (248°F)



Tumble dry low



Do not bleach

Some suggestions for extending the life of reflective fabric on safety clothing:

1. When do machine wash, you may use a mild detergent, but No Bleach or Fabric Softener!
2. Try to avoid wash the reflective products with your work jeans or any clothing with rough fabric or edges. The microscopic glass beads on the reflective fabric can be worn off by rough texture.
3. Try to line dry your reflective products. If you choose to machine dry, try to remove the product immediately. The added heat can damage the reflective fabric.

**HANDLING PRECAUTIONS**

Most of our heat transfer film contains aluminum layer, and sweat /oil/ water stains may occur if the surface of the product has direct contact with hands during application and is then exposed to hot and humid conditions. Even though these blemishes won't affect performance of the product, we strongly recommend handling the reflective fabric with gloves and keeping them in the environment of below 26.7 °C (80 °F) and lowering than 70% relative humidity.