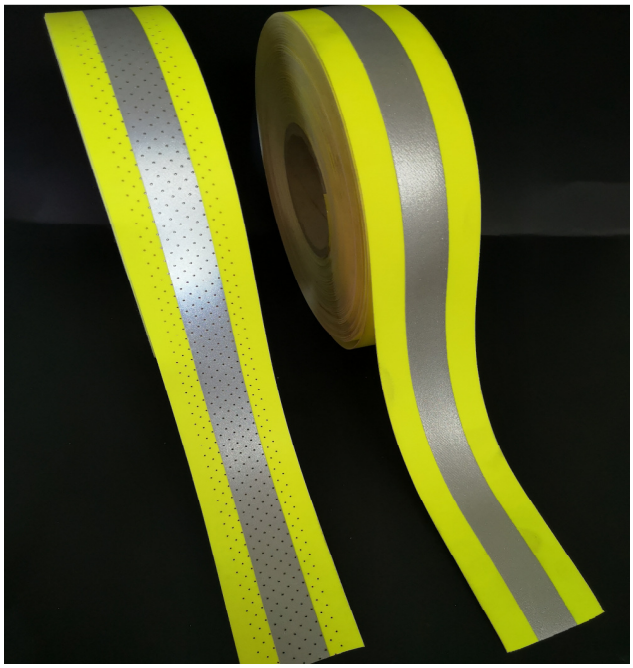
FLAME RETARDANT FABRIC **FLR 700 YELLOW TRIM HP** *Rev. 06 dated 19/03/20*

GENERAL CHARACTERISTICS



Retrolux FLR 700 YELLOW TRIM/HP is designed to enhance the visibility in low conditions, at night-time (reflective stripe) and daytime (yellow fluorescent backing).
The product basically consists basically of a yellow fluorescent coated cotton backing and a silver grey reflective stripe. The reflective surface is made of wide angle, exposed metallizzed glass beads.
Retrolux FLR 700 YELLOW TRIM/HP is also available in perforated version, with the same resistance and photometrc properties of the original material.

RETROLUX FLR 700 is a reflective fabric designed for:

- application on Flame retardant garment
- offer a high resistance of the clothing to repeated domestic washings.
- improve the retro-reflection on clothing in conditions of poor visibility

PRODUCT COMPOSITION

Front coating (grey stripe): Glass microspheres with constant reflective power, metallised.
Binder: Fluorescent yellow polyurethane resin.
Substrate: Flame retardant cotton fabric with high dimensional stability.

Fabric composition	100% Cotton
Weight	350 g/m^2
Weight of the finished product	640-660 g/m^2
Total thickness	620-640 µm

COEFFICIENT OF RETROREFLECTION* (Cd/lux·m^2)

(central grey stripe)

	Entrance Angle			
Observation Angle	**5°**	**20°**	**30°**	**40°**
12'	459-470	387-392	199-202	89-110
20'	313-320	305-322	178-200	78-92
1°	35-39	20-26	22-48	36-38
1° 30'	29-33	17-21	9-11	15-19

**The values were obtained from an average of various sets of samples. Reflected colur: white.*

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The reflective fabric called RETROLUX FLR 700 YELLOW/HP satisfies all the minimum requirements accordingly EN 20471 Norm (separated performance material)

PHYSICAL PERFORMANCE

RETROLUX FLR 700 YELLOW/HP meet or exceed the minimum reflective values after the following test:

1. Flexing (ISO 7854/A 7500 cycles)
2. Cold Fold (ISO 4675 –20°C)
3. Abrasion (UNI 530/2 5000 cycles)
4. Temperature variance (12 hours at 50°C, 20 hours at –30°C)
5. Rainfall test (Annex A)

FLAME RESISTANCE PROPERTIES

RETROLUX FLR 700 YELLOW/HP satisfies the following requirements:

1. **Limited flame spread** (EN 14116, test method EN 15025): **Index 3**
2. After **heat resistance test** (5 min 260°C- ISO 17493 EN 469 Annex A) it considerably exceed 100 Cd/lux·m^2
3. After **radiant heat test** (10 kW/m^2 – EN 366, test method EN 532) it considerably exceed 100 Cd/lux·m^2

WASHING PERFORMANCES

RETROLUX FLR 700 YELLOW/HP exceed the minimum reflective values after:

25 cycles at 90°C (ISO 6330)

50 cycles at 60°C (ISO 6330)

35 cycles of dry cleaning (ISO 3175-method 9.1)

Wash guideline

Minimum temperature: 30°C
Maximum temperature: 95°C

Detergent: Use only **ECE type A without perborates**

- Optical brightness, perborates or additional bleaches, **reduces washing performances of Retrolux FLR 700 YELLOW/HP.**
- **Do not use** organic solvents, chlorine bleaches and alkaline products (pH>8).
- **Do not exceed** 95°C during wash
- **Do not exceed** 120°C during drying

Drying Conditions

- **Air drying is recommended**
- **TUMBLE DRY: NOT EXCEED 90°C**
- **TUNNEL DRY: 100°C is recommended, not exceed 120°C.**

Dry cleaning

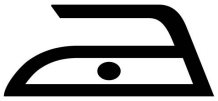
Use pure Perchloroethylene

ADDITIONAL INFORMATION

The material is supplied in rolls of 50 linear meters length and in widths 50 mm and 75 mm.
The cut tolerance is ± 1.5 mm.

***Sewing*:** 100% polyester yarn FR is recommended.

IRONING:
Use cool IRON (110°C)



PRINTABILITY

The product can be printed using inks suitable for polyester or other inks, carrying out preliminary adhesion tests.
We recommend the application of the ink with screen printing technique, good results have been obtained with digital printing with ecosolvent inks.
The correct adhesion of the inks must also be verified by subjecting the printed product to repeated washing.

STORAGE

Retrolux reflective transfer must de stored in a cool and dry area, we recommend temperatures between 15 and 25 °C and relative humidity less than 70%.
Retrolux reflective transfer must be stored in their original box and used within 1 year of receipt.

FOR FURTHER INFORMATION CONTACT IRC S.p.A - Italy

Laboratory Manager