

# RF 900 COMBY-Y

Rev. 03 dated 18/03/20

# **GENERAL CHARACTERISTICS**



Retrolux RF 900 COMBY-Y is a yellow fluorescent fabric.

The product basically consists of exposed, wide angle retroreflective glass beads, with a poly-cotton backing.

RETROLUX RF 900 COMBY-Y is a reflective fabric designed for:

- application on light clothing for firefighters NOT flame retrdant
- Improve the daytime and nighttime visibility of the garments
- offer a good resistance of the clothing to repeated domestic washings

# **PRODUCT COMPOSITION**

Front coating:Glass microspheres with constant reflective power.Binder:yellow fluorescent polyurethane resin with flame retardant features.Substrate:Fabric Polyester 65% Cotton 35%

## **COLORIMETRY**

New material:	Y=87.0	x= 0,370	y= 0,505
After xenon test: (norm EN 471, test method UNI	<b>Y=80.0</b> ISO 105 B02)	x= 0,368	y= 0,484

The colour coordinates and the luminance factor of RETROLUX FLR 900 COMBY-Y satisfy all the minimum requirements envisaged by the Norm **EN 20471: 2017** (combined performance material).



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# <u>COEFFICIENT OF RETROREFLECTION\*</u> (Cd/lux·m<sup>2</sup>)

	Entrance Angle				
Observation Angle		<b>20</b> °	<b>30</b> °	<b>40</b> °	
12'	95-100	97-102	92-95	62-65	
20'	73-75	75-77	70-72	58-60	
<b>1</b> °	9 -9.7	9.4-9.6	9.3-9.7	8.0-7.8	
1 ° 30'	51-5.6	4.8-5.2	4.4-4.6	3.7-3.8	

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

The reflective fabric called RETROLUX RF 900 COMBY-Y satisfies all the minimum requirements according to the Norm EN 20471: 2017 (combined performance material).

## PHYSICAL PERFORMANCE

RETROLUX RF 900 COMBY-Y 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 ℃, 20 hours at –30 ℃)
- 5. Rainfall test (Annex A, ANSI ISEA 107-99 Annex A)
- 6. Colour fastness to dry friction (ISO 105 X12 10 cycles): Index 5
- 7. Colour fastness to wet friction (ISO 105 X12 10 cycles): Index 5
- 8. Colour fastness to mechanical washing with synthetic cleaning (ISO C06, C1S test 60 ℃ without perborates): Index 5

#### WASHING PERFORMANCES

RETROLUX RF 900 COMBY-Y exceed the minimum reflective values after:

50 cycles at 60 °C (ISO 6330)

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

## Wash guideline



Minimum temperature: 30 ℃ Maximum temperature: 62 ℃





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Detergent: Use only ECE type A without perborates



- Optical brightness, perborates or additional bleaches, reduces washing performances of Retrolux RF
  <u>900 COMBY-Y.</u>
- Do not use organic solvents, chlorine bleaches and alkaline products (pH>8).
- Do not exceed 95 ℃ during wash

## Drying Conditions

• Air drying is recommended.

#### Dry cleaning



Use pure Perchloroethylene

# **ADDITIONAL INFORMATION**

The material is supplied in rolls of 50 linear meters length and in all widths from 1 cm till 1 meter. The cut tolerance is  $\pm$  1.5 mm. For cutting die cutting is recommended. Reflective fabric can also be hand-cut or guillotined.

Sewing: 100% polyester is recommended.

IRONING: Use cool IRON (110°C)



## **PRINTABILITY**

The product correctly transferred and in any case without the front liner, 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.





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# **STORAGE**

Retrolux reflective transfer or fabric 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