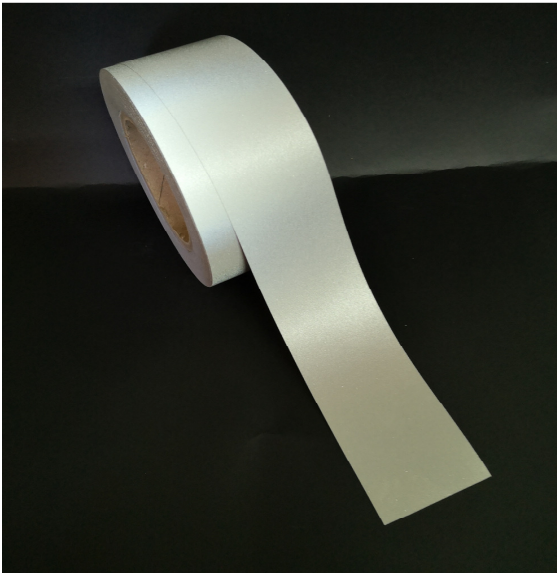


**GENERAL CHARACTERISTICS**



The product is basically made of a fabric coated with metallised microspheres, having known reflective index and extremely high refraction power, thanks to a polyurethane binding agent with very high flexibility and resistance to mechanical as well as chemical-physical stresses.

RF 1000 I.W. VIP reflective fabrics are characterised by strong surface brightness and reflection powers higher than 550 Cd/lux·m<sup>2</sup> by 0,2°/5° angles.

RETROLUX RF 1000 IW VIP is a reflective fabric designed for:

- offer a very high resistance of the clothing to repeated domestic washings
- offer a very high resistance of the clothing to repeated industrial washings
- improve the retro-reflection on clothing in conditions of poor visibility

**PRODUCT COMPOSITION**

Front coating: Glass microspheres with constant reflective power, metallised

Binder: Aliphatic polymerising polyurethane resin.

Substrate: Polyester/Cotton fabric with high dimensional stability.

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

Observation Angle	Entrance Angle			
	5°	20°	30°	40°
12'	540-543	535-541	377-403	180-208
20'	343-360	344-366	305-326	159-183
1°	29-30	27-30	22-32	22-28
1° 30'	17-18	17-20	20-21	10-11

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

**The silver grey reflective fabric called RETROLUX RF 1000 I.W. VIP satisfies all the minimum requirements accordingly EN 20471 Norm**

## **PHYSICAL PERFORMANCE**

RETROLUX RF 1000 I.W. VIP 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, ANSI ISEA 107-99 Annex A)

## **WASHING PERFORMANCES**

- **Industrial washing performance**

RETROLUX RF 1000 I.W. VIP exceed the minimum reflective values after:

**70 industrial washing cycles with pH 11 detergents (method ISO 15797)**

- **Domestic washing performance**

RETROLUX RF 1000 I.W. VIP exceed the minimum reflective values after:

**25 cycles at 90°C (ISO 6330)**

**100 cycles at 60°C (ISO 6330)**

- **Dry washing performance**

RETROLUX RF 1000 I.W. VIP exceed the minimum reflective values after:

**65 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**

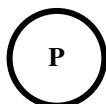


- Optical brightness, perborates or additional bleaches, reduces washing performances of Retrolux RF 1000 I.W. VIP.
- Do not use organic solvents, chlorine bleaches and alkaline products (pH>8).
- Do not exceed 95°C during wash

### **Drying Conditions**

- Air drying is recommended
- **TUMBLE DRY: NOT EXCEED 90°C**
- **TUNNEL DRY: the Retrolux 1000 I.W. VIP can be tunnel-dried at 160°C.**

### **Dry cleaning**



Use pure Perchloroethylene

### **ADDITIONAL INFORMATION**

The material is supplied in rolls of 50 linear meters length and in all widths from 1 centimeter till 1 meter.

The cut tolerance is  $\pm 1.5$  mm.for

For cutting die cutting is recommended. Reflective fabric can also be hand-cut or guillotined.

**Sewing:** 100% polyester yarn 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.

### **STORAGE**

Retrolux reflective transfer must be 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