

# RAYFLEX ROLL 0.5<sub>mm</sub>\*

## RADIATION PROTECTION

AGAINST IONIZING RADIATION

### LEAD-FREE

\* 0.5 mm = the thickness of the RayFlex sheet (the equivalent thickness of lead = 0.15 mm)



**Bi-layered** fabric roll:  
**Nylon / Rare earth** rubber  
**Excellent protection against Alpha, Beta  
and low energy Gamma and X radiation  
emissions**

Flexibility



Mechanical properties

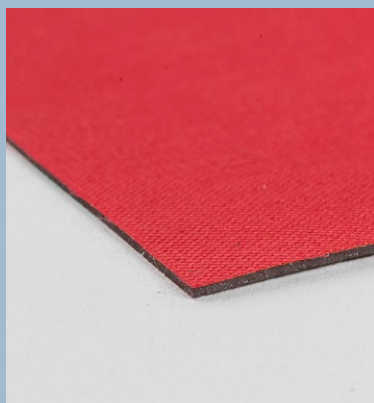


Chemical resistance



Price





## MECHANICAL PROPERTIES

### RESISTANCE FOR A SHEET

Pendulum Tear NFG 37128	> 1 DaN in the chain direction
EN 963 perforation	> 3 DaN side loads > 4 DaN Polyamide fabric side
Breakage	> 45 DaN / 5 cm, weft direction > 75 DaN / 5 cm meaning chain
Flexibility	3 cm (Measured according to standard flat buckle ISO 5979)

## RADIOPROTECTIVE PROPERTIES

### LEAD EQUIVALENCE FOR A SHEET

Energy (KeV)	Lead Equivalence (micron meter)
0 to 42	90
42 to 55	144
55 to 89	270
90 to 150	110

(Measurements made with a Cd / Te sensor)

Minimum mass per unit area of 1,800 g / m<sup>2</sup>

### CHARACTERISTICS WITH LOW ENERGY

Number of sheets	Density / Attenuation Gamma	Quality
1	1.80	Good
2	3.60	Very good
3	5.40	Excellent

### MEASURE OF MITIGATION IN DOSIMETRY:

Energy (KeV)	Mitigation (%)
20 to 50	94%
20 to 70	88%
20 to 100	82%
20 to 120	76%
20 to 150	70%

Measurements made on 1 slick using a 70 µA X generator and 1 mm aluminum spectrum hardening, a 1-minute acquisition time using a PTW supplier's chamber type 77334.

### MEASURE OF ATTENUATION WITH RADIOACTIVE SOURCES ON A SINGLE SHEET:

Energy (KeV)	Mitigation (%)
81	56%
276	14%
303	8%

Attenuation is less than 5% for energies greater than 355 KeV

Source: Barium 133

## SIZE AND WEIGHT

Roll of 0.90 meters wide x 20 meters long / Roll weight: 33 kg

## MAINTENANCE TIPS

- Storage in the original packaging between + 5° C and + 25° C
- Expiration: 3 years in the original packaging
- Wash with soapy water, rinse with clean water and dry in a stream of air at low temperature (< 40° C)

## TREATMENT

- Not recyclable
- Disposal as a simple non-toxic waste if not contaminated with a hazardous material or radioactive contamination

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