

RayFlex Radiation Protection Roll

A non-toxic, **lead-free** material for **protection** against low-energy ionizing radiation





RayFlex, the flexible material for radiation protection

RayFlex material is a lead-free composite designed by Piercan for personal protective equipment against ionizing radiation. The fields of application are nuclear energy and nuclear interventional medicine. Its manufacturing process of spraying guarantees the homogeneity of the material's performance.



weight reduction
from 25 to 50% for
the same attenuation
capacity as a lead
product



optimized flexibility thanks
to flexible textile



homogeneity of performance thanks
to the dissolving
coating



no risk of lead contamination
during manufacture
and use



simple removal
with no
need for
decontamination

Sectors of application



NUCLEAR ENERGY



- **Use:** Personal Protective Equipment (apron, jacket, thyroid protector, skirt ...), collective protection (tablecloth, pipe cover).



INTERVENTIONAL AND NUCLEAR MEDICINE



- **Use:** nuclear medical surgery, interventional radiology, radiotherapy, brachytherapy.

RayFlex material properties

Main characteristics of a sheet which is composed of a single thickness (0.5mm), width and density...



HIGH PERFORMANCE IN LEAD-FREE RADIATION PROTECTION

The RayFlex radiation protection material is of exceptional quality in terms of weight and radiation protection properties. It guarantees compliance with EN61331 standards and the requirements of users to wear personal protective equipment for extended periods. Depending on the context of use, it is possible to obtain radiation protection performance in lead equivalence up to 0.9 mm depending on the number of layers.

Number of layers	Thickness	Lead Equivalence Energy from 20 to 150 KeV *
1	0.50 mm	0.15 mm
2	1 mm	0.30 mm
3	1.50 mm	0.45 mm
4	2 mm	0.60 mm
5	2.50 mm	0.75 mm
6	3 mm	0.90 mm

PRODUCT BENEFITS

- **A format adapted to your needs**
The large packaging dimensions (0.90 m wide x 20 m long) allows you a wide choice in terms of end use.
- **An easy material to transform**
Its flexibility and light weight allows it to adapt to manufacturing techniques, such as, cutting, gluing, sewing or heat sealing.



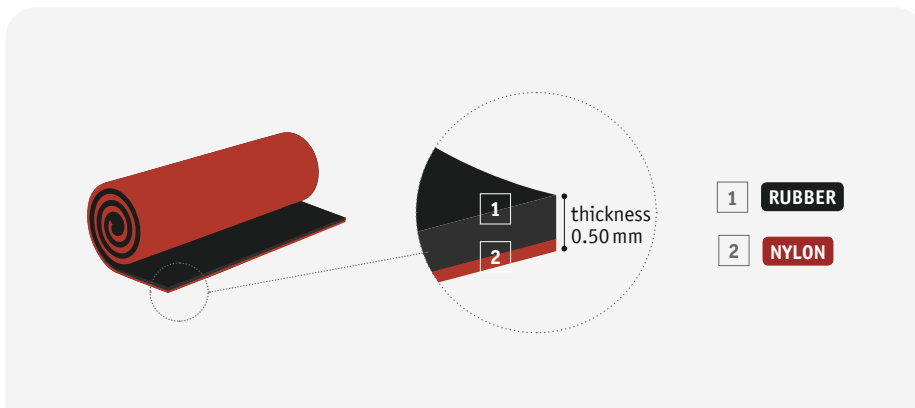
THE BENEFITS OF RAYFLEX RADIATION PROTECTION MATERIAL

- **Lead-free, non-toxic material**
Its treatment and disposal can be carried out as a simple non-toxic waste. There is no risk of lead contamination on finished products or for personnel during use.
- **Homogeneity of performance**
Thanks to the manufacturing technique of spraying (with an internal layer produced in dissolution), the product offers the same protection throughout entire surface.
- **Good protection and resistance**
Offers excellent protection against ionizing radiation at low energies, high mechanical protection and high resistance to ozone and UV.

RayFlex material composition

It is comprised of two layers:

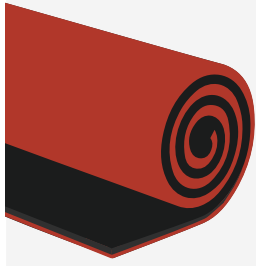
- First layer: Rubber with rare earth metals
- Second layer: Nylon



ORANO PATENT

Rayflex, a protective material with a specific formulation adapted to the spectrum of MELOX, is a product manufactured under license from **ORANO PATENT EP 2 798 643** validated in France. **PIERCAN** intervened as part of the search for technological solutions.

AVAILABLE PRODUCT



RADIATION PROTECTION RAYFLEX ROLLER 0.5mm

- Dimensions:
- Thickness of 0.50 mm
 - Roll weight: 33 Kg
 - Width: 0.90m
 - Length: 20 m
 - Minimum surface density of 1800 g / m²

AVAILABLE APPLICATIONS

RAYFLEX RADIATION PROTECTION SCREEN



Custom dimensions

RADIATION PROTECTION RAYFLEX JACKET 1.0mm



Available in 4 sizes: M, L, XL and XXL

POSSIBLE APPLICATIONS

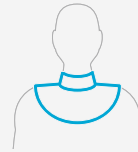
From the RayFlex Radiation Protection Sheet, it is possible to develop other **individual** or **collective** radiation protection equipment.



APRON



SKIRT



THYROID PROTECTOR



WALL CROSSING CUT INTO STRIPS

CUSTOMIZABLE RAYFLEX MATERIAL

Depending on your needs, we can offer you other formulations of the RayFlex material (other compositions of the rare earth layer), depending on the nature of protection sought.



ASK FOR YOUR RAYFLEX MATERIAL SAMPLE

Our sample will allow you to test the effectiveness of our RayFlex material according to your context of use.

PIERCAN around the world



Piercan US Office • Factory
San Diego

USA



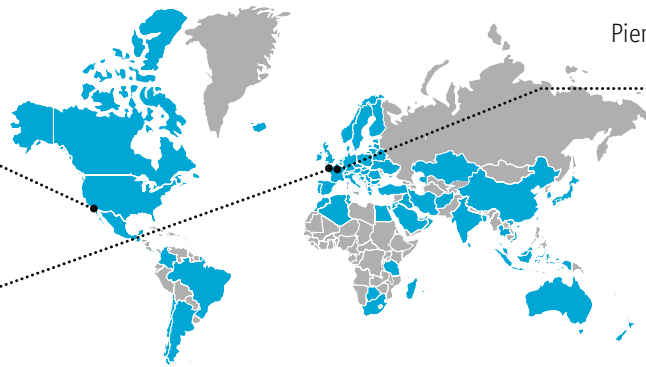
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Piercan products are sold in more than 50 countries



A QUESTION OR IN NEED OF INFORMATION?

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