

Orthoses are our passion

# Materials

- Technical and innovative textiles by Mediroyal



## Materials - Technical and innovative textiles by Mediroyal

Mediroyal has for many years invested heavily in technical development of materials. This has lead to many new materials like Ventus<sup>™</sup>, Neptune<sup>™</sup>, ARX<sup>®</sup> and NRX<sup>®</sup>. In this brochure we are also introducing our newest innovation; I-ARX<sup>®</sup> and P-ARX<sup>®</sup> which is a system for hookless lining in orthoses.

We have now decided to offer our technical quality textiles, used in our products, as raw materials. We manufacture the compositions by ourselves in our ISO9001/14001 certified factory in Taiwan, ROC. In order to simplify handling, transportation and storage we have developed a standardized measurement of the materials with a width of 58 cm and a length of 1 meter. In addition to this we have created a paper tube package that holds each material to make handling and storing in a clinical setting easier but also to protect the material. Most materials can also be ordered as larger sheets or by running meters. Because orthoses are simply our passion!

#### Mediroyal Sharkskin Neoprene · 3 mm Sharkskin/Black Nylon

This material is made from 100% CR-foam with 12 degrees density (Type A). The material is laminated with a black nylon jersey on one side and has raw CR-sharkskin on the other side. The material is latex free.

**Suitable for:** This material provides a high elongation and skin grip on the sharkskin side making it suitable for constructions that need to have a good skin gripping function.

୶	EU490003	3 mm	
K A K Y	Width: Length:	58 cm 100 cm	
	The material is also	available as a full sheet	
*	EU490003-S	3 mm*	
К Л К И	Size:	125 cm x 318 cm	
Ĭ		cial order item with longer lead time. rvice for more information and price.	
	Material compositior 99% CR-Foam, 1%		
	Washing instruction:		



Machine washable in 60° C

## Mediroyal Neoprene with OP Loop textile/Black Nylon

This material is made from 100% CR-foam with 12 degrees density (Type A). The material is laminated with an elastic loop fabric on one side and black nylon jersey on the back side. The material is latex free.

**Suitable for**: This material provides a high elongation. The loop fabric makes it possible to make orthotic constructions without having to add a loop part for attachment. Simply cut your application and add a hook strap. Most hook qualities will provide a good grip onto the loop fabric surface. The material can also be used as a lining by applying the EU445060 NRX® Self-adhesive Low profile hook on the inside of the orthotics construction. The material can be cut without fraying.

	EU490101	1 mm	
· .	EU490103	3 mm	
r	EU490105	5 mm	
	Width: Length:	58 cm 100 cm	

#### The material is also available as a full sheet:

•	EU490101-S EU490103-S EU490105-S	1 mm* 3 mm* 5 mm*	
	Size:	125 x 318 cm	
	* The articles are stand	dard stock items	

Material composition: 97% CR-Foam, 2% Polyamide, 1% Nylon

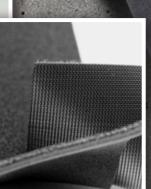
Washing instruction: Machine washable in 60° C

**→**|+





Hook compatible



Mediroyal Neoprene with Black Nylon on both sides This material is made from 100% CR-foam with 12 degrees density (Type A). The material is laminated with black nylon jersey on both sides. The material is latex free. Suitable for: This material provides a high elongation and is suitable for most orthotics applications. The material can be cut without fraying. EU490201 1 mm EU490203 → 3 mm EU490205 5 mm 58 cm Width: К Л К Л Length: 100 cm The material is also available as a full sheet: EU490201-S 1 mm\* → EU490203-S 3 mm\* EU490205-S 5 mm\* K 7 Size: 125 x 318 cm \* The articles are standard stock items Material composition: 98% CR-Foam, 2% Nylon Washing instruction: 5 Machine washable in 60° C

## Mediroyal Neoprene with Royal Blue Nylon/Black Nylon

This material is made from 100% CR-foam with 12 degrees density (Type A). The material is laminated with nylon jersey on both sides. The material is latex free.

Suitable for: This material provides a high elongation and is suitable for most orthotics applications. The material can be cut without fraying.

EU490301	1 mm	
EU490303	3 mm	
EU490305	5 mm	
Width:	58 cm	
Length:	100 cm	

#### The material is also available as a full sheet:

<b>*</b>	EU490301-S EU490303-S	1 mm* 3 mm*	
T	EU490305-S	5 mm*	
К Л К У	Size:	125 x 318 cm	

#### 125 x 318 cm

\* These articles are special order with longer lead time. Contact customer service for more information and price.

Material composition: 98% CR-Foam, 2% Nylon

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Washing instruction: Machine washable in 60° C

## Mediroyal NRX® Strap Material

This is our popular NRX<sup>®</sup> Strap material which is made from 100% CRfoam with 12 degrees density (Type A). The material is micro perforated for maximum ventilation. One side has elastic OP loop fabric and the inside has a skin friction surface. The material is latex free.

**Suitable for:** This material provides a high elongation, has a skin friction surface on the inside and is suitable for most orthotics applications where proprioceptive function is needed. The material can be cut without fraying. The material can also be used as a friction lining by applying the EU445060 NRX® Self-adhesive Low profile hook on the inside of the orthotic construction. The material can also be applied on straps to prevent migration.

*	EU446601 EU446603	1 mm 3 mm
K A	Width:	58 cm
K N	Length:	100 cm

#### The material is also available as a full sheet:

*	EU446900 EU446603-S	1 mm* 3 mm*
K 7 K 1	Size:	125 x 318 cm

\* These are standard stock items. Contact customer service for more information and price

Material composition: 98% CR-Foam, 2% Nylon

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5

Washing instruction: Machine washable in 60° C



### Mediroyal NRX<sup>®</sup> Strap Double

This is our popular NRX<sup>®</sup> Strap Double material which is made from 100% CR-foam with 12 degrees density (Type A). The core of the material is 1 mm micro perforated foam for maximum ventilation. Elastic OP loop fabric is laminated on both sides. The material is latex free.

**Suitable for:** This material provides a high elongation and a good stability. The material can be cut without fraying and the loop fabric works with most hook qualities.

<b>→</b>   ←	EU447602	3 mm
K 7	Width: Length:	58 cm 100 cm
	The material is als	o available as a full sheet:
→	EU447602-S	3 mm*
К 7 К У	Size:	125 x 318 cm
		der with longer lead time.

Contact customer service for more information and price.

Material composition: 98% CR-Foam, 2% Nylon

Washing instruction: Machine washable in 60° C look compatible

Mediroyal ARX<sup>®</sup> Spacer Fabric

The ARX<sup>®</sup> spacer fabric we use in several of our ARX<sup>®</sup> branded products for knee- and thumb braces. It was developed as a ventilated alternative to neoprene. The material is latex free.

**Suitable for:** The ARX<sup>®</sup> Spacer fabric can be used for many orthotic applications. The material has a pressure absorbing function in combination with good compression and high ventilation.

	EU490500	4 mm	
♦	20490500	4 1010	
К 7 К У	Width:	58 cm	
R R	Length:	100 cm	
	The material is al	so available as running meter:	
→	EU490500-N	1 4 mm*	
К Л К У	Width:	130 cm	
T		becial order item with longer lead time.	
	Contact customer	service for more information and price.	2450
	Material compositi	on.	
		% Polyamide, 5% Spandex	STAN
	Washing instructio	n.	
E	Machine washable		

## Mediroyal Ventus<sup>™</sup> Material · Black Lycra/Black Fleece

The Ventus<sup>™</sup> material is used in our Ventus<sup>™</sup> branded wrist braces. It has a Lycra surface that has a breathable TPU membrane with a micro fleece lining on the inside. The Ventus<sup>™</sup> material has a high comfort and high breathability. The material is latex free.

**Suitable for:** The Ventus<sup>™</sup> material can be used for most orthotic applications where high comfort and breathability is needed. The material can be cut without fraying.

*	EU490400	1,8 mm	
<b>KZY</b>	Width: Length:	58 cm 100 cm	
	The material is als	o available as running meter:	
→	EU490400-M	1,8 mm*	
К.Я. И М	Width:	140 cm	
T		ecial order item with longer lead time. ervice for more information and price.	
	Material compositio 50% Polyester, 45%		
5	Washing instruction Machine washable i		

## Mediroyal Ventus<sup>™</sup> Material · Beige Lycra/Black Fleece

The Ventus<sup>™</sup> material is used in our Ventus<sup>™</sup> branded wrist braces. It has a Lycra surface that has a breathable TPU membrane with a micro fleece lining on the inside. The Ventus<sup>™</sup> material has a high comfort and high breathability. The material is latex free.

**Suitable for:** The Ventus<sup>™</sup> material can be used for most orthotic applications where high comfort and breathability is needed. The material can be cut without fraying.

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→	EU490401	1,8 mm
К 7 К У	Width: Length:	58 cm 100 cm
	The material is also	o available as running meter:
<b>→</b>   ←	EU490401-M	1,8 mm*
К 7 К У	Width:	140 cm
T		cial order item with longer lead time. ervice for more information and price.
	Material compositio 50% Polyester, 45%	
E	Washing instruction Machine washable i	

## Mediroyal Neptune<sup>™</sup> Material with OP Loop/Neptune<sup>™</sup> Fabric

The Neptune<sup>™</sup> material was developed by Mediroyal 2015. It's a hydrodynamic material that is breathable but also dries quickly. It's used in both our Proxi<sup>®</sup>, Resto<sup>®</sup> and Exto<sup>®</sup> Inter products. The material is latex free.

**Suitable for:** The Neptune<sup>™</sup> material can be used for most orthotic applications where high comfort, breathability and quick drying of the material is needed. The material can be cut without fraying. It can also be applied as a lining into orthoses by applying self adhesive hook into the construction.

<b>≯</b>   ←	EU490403	1,6 m	
L	Width	58 cm	

Length:

53

×)+

5

100 cm

#### The material is also available as running meter:

- EU490403-M 1,6 mm\*
- Width: 140 cm
- \* The article is a special order item with longer lead time. Contact customer service for more information and price.

Material composition: Black OP loop fabric/TPU/Neptune™ fabric 50% Polyester, 45% Nylon, 5% TPU

Washing instruction: Machine washable in 40° C

## Mediroyal Neptune<sup>™</sup> Material · Black Lycra/Neptune<sup>™</sup> Fabric

The Neptune<sup>™</sup> material was developed by Mediroyal 2015. It's a hydrodynamic material that is breathable but also dries quickly. It's used in our Neptune<sup>™</sup> wrist braces and Exto<sup>®</sup> Inter products. The material is latex free.

**Suitable for:** The Neptune<sup>™</sup> material can be used for most orthotic applications where high comfort, breathability and quick drying of the material are needed. The material can be cut without fraying.

→	EU490404	1,2 mm		
K A K N	Width: Length:	58 cm 100 cm		
	The material is also	o available as running meter:		
→	EU490404-M	1,2 mm*		
к л К У	Width:	140 cm		
Ĭ		cial order item with longer lead time. ervice for more information and price.		
	Material composition: Black Lycra/TPU/Neptune™ fabric 50% Polyester, 45% Nylon, 5% TPU			
	Washing instruction: Machine washable in			

Hook compatible

# I-ARX<sup>®</sup> & P-ARX<sup>®</sup>

## – The second generation of orthotic linings

Mediroyal has developed an orthotic lining system that doesn't require conventional hook and loop for attachment. Instead we are using the same technology as we have in our ARX<sup>®</sup> Strap which consists of micro fibers that self attach. This makes it possible to laminate or glue the I-ARX<sup>®</sup> inner liner into the orthotic device and then add the P-ARX<sup>®</sup> padding. The padding can then easily be removed for washing in 60° machine wash.

#### **I-ARX® Inner Lining**

This inner lining that is made from micro fiber with a PU-film on the back side. This lining is elastic and can be applied inside the orthosis by either lamination, self adhesion from thermoplastics or by contact glue. The P-ARX<sup>®</sup> padding can be attached onto the I-ARX<sup>®</sup> inner lining. The material is latex free.

**Suitable for:** Inner lining for orthotics to attach the P-ARX<sup>®</sup> padding to. Works excellent for insoles, fracture bracing, spinal bracing, knee braces and hand splints.

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<b>→</b>   ←	EU458101	0,15 mm					
К. Л К Х	Width: Length:	58 cm 100 cm					
The material is also available as running meter:							
<b>→</b>   ←	EU458101-M	0,15 mm*					
К 7 И У	Width:	140 cm					
* The article is a standard stock item.							
	Material composition: 95% Polyamide, 5% TPU						
8	Washing instruction: Once the I-ARX <sup>®</sup> is attached into the orthosis, we recommend hand wash with mild detergent.						



#### P-ARX<sup>®</sup> Neptune<sup>™</sup> Thin Padding

This is a thin padding that can be used in orthotics with limited space. The padding is made from Neptune<sup>™</sup> as the top layer against the skin. Neptune<sup>™</sup> is breathable and hydrodynamic and dries quickly. The bottom side of the material attach to the I-ARX<sup>®</sup> Inner Lining. The material is latex free.

**Suitable for:** Padding for insoles, fracture braces, spinal braces, knee braces and hand splints.

* <b>  </b> +	EU458201	1,8 mm	
I R Z	Width:	58 cm	

Length:

5

 100 cm

#### The material is also available as running meter:

- EU458201-M 1,8 mm\*
- Width: 140 cm
- \* The article is a standard stock item.

Material composition: 48% Polyamide, 48% Polyester, 4% TPU

Washing instruction: Machine washable in 60° C

#### P-ARX<sup>®</sup> Neptune<sup>™</sup> 3,5 mm Padding

This is a thicker padding that can be used in orthotics that require pressure absorption. The padding is made from Neptune<sup>™</sup> as the top layer against the skin. Neptune<sup>™</sup> is breathable, hydrodynamic and dries quickly. The core is a 2 mm micro perforated CR foam. The bottom side of the can be attached to the I-ARX<sup>®</sup> Inner Lining. The material is latex free.

Suitable for: Fracture braces, spinal braces and knee braces.

<b>→</b>   ←	EU458202	3,5 mm	•
к л К У	Width:	58 cm	
R R	Length:	100 cm	

The material is also available as a full sheet :

#### EU458202-M 3,5 mm\*

Size: 125 x 318 cm \* The article is a standard stock item.

Material composition: 40% Polyamide, 40% Polyester, 20% CR-foam

Washing instruction: Machine washable in 60° C

## NRX<sup>®</sup> Low Profile Hook

The NRX<sup>®</sup> hook is suitable for the construction of individual orthotic devices with the different Mediroyal materials. All materials with loop fabric on one side can be attached in orthoses by using the self adhesive hook.

The different hook qualities offered are:

#### EU445060 NRX<sup>®</sup> Self Adhesive Hook

50 mm x 25 m roll, Transparent

К Л 2 У

к 7 2 У

к 7 К У

#### EU445061 NRX® Hook

50 mm x 25 m roll, Black with loop top side

#### EU445161 NRX<sup>®</sup> Hook Strong

50 mm x 25 m roll, Black with loop top side

NRX<sup>®</sup> and ARX<sup>®</sup> is registered trademarks of Mediroyal Nordic AB, Sweden © Mediroyal Sweden AB 2020

## Orthoses are our passion



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