



## Description

PB implant is a Patch & Plug IIb<sup>(2)</sup> class biocompatible<sup>(1)</sup> medical device. This implant is specially manufactured for optimal covering of weak areas caused by inguinal hernia defect during open Lichtenstein repair.

The implant is sterilized under Ethylene Oxide process and is available 5 years after sterilization. PB implant is sold under blister and Tyvek pouch, and packaged in filmed cardboard boxes.

- (1) According to ISO 10993 – 1  
(2) According to European Directive 93/42/CEE (2007/47/CE)

## Advantages

- ⊕ Excellent shape memory properties
- ⊕ Good flexibility for an easy deployment in the hernia location
- ⊕ Biocompatible ink mark for a better placement of the implant.
- ⊕ Good efficiency and ergonomic due to its Plug & Patch mechanism.

## Materials

PB implants are made of knitted polypropylene:

- Standard weight (PPT Std)
- Light weight (PPT LW)

	Knitted polypropylene	
<b>Composition</b>	100% Isotactic Polypropylene Knitted Mono filament double strand Ø 0.15 mm	
<b>Process</b>	Ladderproof	
<b>Basis weight</b>	<b>Standard (PPT Std)</b> 90g/m <sup>2</sup>	<b>Light Weight (PPT LW)</b> 60g/m <sup>2</sup>
<b>Thickness</b>	0,6 mm	
<b>Pore Size</b>	<b>Standard (PPT Std)</b> 0,7 mm <sup>2</sup>	<b>Light Weight (PPT LW)</b> 2,3 mm <sup>2</sup>
	Knitted polypropylene	
<b>Burst resistance</b> ISO 13938 – 1	>500kPa	
<b>Maximal strength</b> ISO 13934 – 1 (PET, PPT) EDANA 20-2-89 (PPNT)	>180N (Warp direction) >320N (Fill direction)	>160N (Warp direction) >210N (Fill direction)
<b>Elongation at break</b> ISO 13934 – 1 (PET, PPT) EDANA 20-2-89 (PPNT)	>80% (Warp direction) >50% (Fill direction)	>100% (Warp direction) >70% (Fill direction)
<b>Porosity</b> NF S 94-801 : 2007	<b>Standard (PPT Std)</b> 50%	<b>Light Weight (PPT LW)</b> 60%
<b>Oiling rate</b> NF S 94 – 167 – 5	<1,2%	
<b>Rejection</b>	-	
<b>Surfactant residue rate</b> NF EN 1644 - 1	0%	

## References

	Standard (PPT Std)	Light Weight (PPT LW)
Patch 10x5cm Plug Ø5cm	411105	412105
Patch 12x6cm Plug Ø6cm	411126	412126
Patch 14x8cm Plug Ø8cm	411148	412148

## Clinical Datas / Bibliography

- ❖ [035] The lightweight and large porous mesh concept for hernia repair – Review ISSN 1743-440, Futures Drugs Ltd. 2005
- ❖ [038] Randomized clinical trial comparing lightweight composite mesh with polyester or polypropylene mesh for incisional hernia repair – J. Conze, A.N. Kingsnorth, JB. FLAMENT, R. SIMMERMARCHE, G. ARLT, C. LANGER, E. SCHIPPERS, M. HARTLEY and V. SCHUMPELICK – British Journal of surgery 2005;92:1488-1493
- ❖ [072] Tolérance des prothèses herniaires. Caractéristiques de principaux matériaux utilisés - E. ESTOUR – La Journal de Cardio-chirurgie- N°53, Mars2005
- ❖ [107] The argument for Lightweight polypropylene Mesh in hernia Repair - W. S. COBB, K.W. KERCHER, B. TODD HENIFORD – Surgical innovation, vol 12, no 1 (march), 2005: pp63-69

## Signs used in the label and in the Instructions For Use



Refer to IFU D133



Do not use if damaged packaging



For Single use only



Do not sterilize again

**STERILE EO**

Device sterilized under EO process



Available 5 years after sterilization



**MICROVAL**

ZA Champ de Berre - 43240 Saint Just Malmont, France  
Tel : 33 4 77 35 03 03 Fax : 33 4 77 35 03 19

[info@microval.fr](mailto:info@microval.fr)

