



Securised glove ports

# BCS Piercan

FDA COMPLIANT (§ 177.2600, CFR21)



PIERCAN presents an innovative, exclusive and patented solution, developed by its research and development laboratory: the securised glove port (BCS, bague de connexion sécurisée) that allows **changing gloves without loss of containment.**

- The risk of breach of containment is significantly reduced thanks to a triple security mechanism: the mechanical strength of the glove - port - arm guard, the level of sealing obtained and the protection of the glove during operations and changing.
- The BCS offers other advantages: greatly reduced muscular efforts, simplified training and authorisation of personnel, increased endurance of equipment.
- The BCS offers two methods of changing the glove: through over-pressure (removing the glove from the interior of the isolator towards the exterior), and by under-pressure (removing the glove towards the interior of the isolator).



## PRODUCT RANGE

Material used for the glove safety sleeve and the arm guard safety sleeve

Chemical composition	class VI USP 23 biocompatible Polybutylene Terephthalate (PBT)
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Material code	PBT
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Material joined to the lip portion of the glove safety sleeve

Chemical composition	SEBS Thermoplastic elastomers (Thermolast M)
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Material code	SEBS
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General characteristics

Colour	White
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Internal diameter (mm)	Ø 91
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Width (mm)	50
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## PHYSICO-CHEMICAL PROPERTIES OF PBT

	IPA results at 70% <sup>(1)</sup>	IPA results at 70% <sup>(2)</sup>	H <sub>2</sub> O <sub>2</sub> results at 35% <sup>(1)</sup>	H <sub>2</sub> O <sub>2</sub> results at 35% <sup>(2)</sup>	Mechanical strength at 3 sterilisations through autoclaving <sup>(3)</sup>	Mechanical strength at 3 sterilisations through autoclaving <sup>(2)</sup>	Mechanical strength at 3 sterilisations through VDmax25 irradiation <sup>(1)</sup>	Mechanical strength at 3 sterilisations through VDmax25 irradiation <sup>(2)</sup>
Tensile strength (MPa) according to ISO 527	54,24	54,26	56,76	54,26	57,9	59,2	56,6	59,2
Elongation at break (%) according to ISO 527	15,39	13,77	14,81	13,77	6,5	5,8	4,7	5,8
Modulus of elasticity (MPa) according to ISO 527	2777,89	2764,62	2781,27	2764,62	-	-	-	-
Charpy impact test: resilience (KJ/m <sup>2</sup> ) according to ISO 179	187,8	190,5	188	190,5	-	-	-	-

(1) bulk weathering over 72 hours (2) no weathering

## MECHANICAL PROPERTIES

Traction strength of the arm guard <sup>(3)</sup>	with respect to the port towards the isolator	> 700 N
	from the port towards the exterior of the isolator	> 700 N
Glove strength <sup>(3)</sup>	with respect to the port	> 400 N
Traction strength of the glove safety sleeve body <sup>(3)</sup>	with respect to the body of the arm guard safety sleeve towards the isolator with central drawing	> 500 N
	with respect to the body of the arm guard safety sleeve towards the isolator with drawing torque	> 500 N
	with respect to the body of the arm guard safety sleeve in the direction of hand removal with central drawing	> 500 N
	with respect to the body of the arm guard safety sleeve in the direction of hand removal with drawing torque	> 500 N

(3) pursuant to 374 - 5.4 (effort > 100 N.)

## D-VALUE MEASUREMENT

PBT	1.2 min
Stainless steel	0.8 min

## SEALING CHARACTERISTICS

Compliant with EN 421	YES
Bacterial test in static phase (without changing gloves) <sup>(4)</sup>	YES
Bacterial test in dynamic phase (with 5 glove changes) <sup>(4)</sup>	YES

(4) PIERCAN protocol

## GLOVE CHANGING EFFORT

for clipping a glove onto the port	70 N
for changing a glove	110 N

## ENDURANCE CHARACTERISTICS WITH THE SAME UNITS

Effort for removing a stud on the 1st attempt of the glove safety sleeve traction test as regards the arm guard safety sleeve	751 N
Effort for removing a stud at the 20th attempt of the glove safety sleeve traction test as regards the arm guard safety sleeve	751 N

EU



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