



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 ISP 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% ⁽¹⁾	IPA results at 70% ⁽²⁾	H ₂ O ₂ results at 35% ⁽¹⁾	H ₂ O ₂ results at 35% ⁽²⁾	Mechanical strength at 3 sterilisations through autoclaving ⁽³⁾	Mechanical strength at 3 sterilisations through autoclaving ⁽²⁾	Mechanical strength at 3 sterilisations through VDmax25 irradiation ⁽¹⁾	Mechanical strength at 3 sterilisations through VDmax25 irradiation ⁽²⁾
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 ²) 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 ⁽³⁾	with respect to the port towards the isolator	> 700 N
	from the port towards the exterior of the isolator	> 700 N
Glove strength ⁽³⁾	with respect to the port	> 400 N
Traction strength of the glove safety sleeve body ⁽³⁾	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) ⁽⁴⁾	YES
Bacterial test in dynamic phase (with 5 glove changes) ⁽⁴⁾	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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