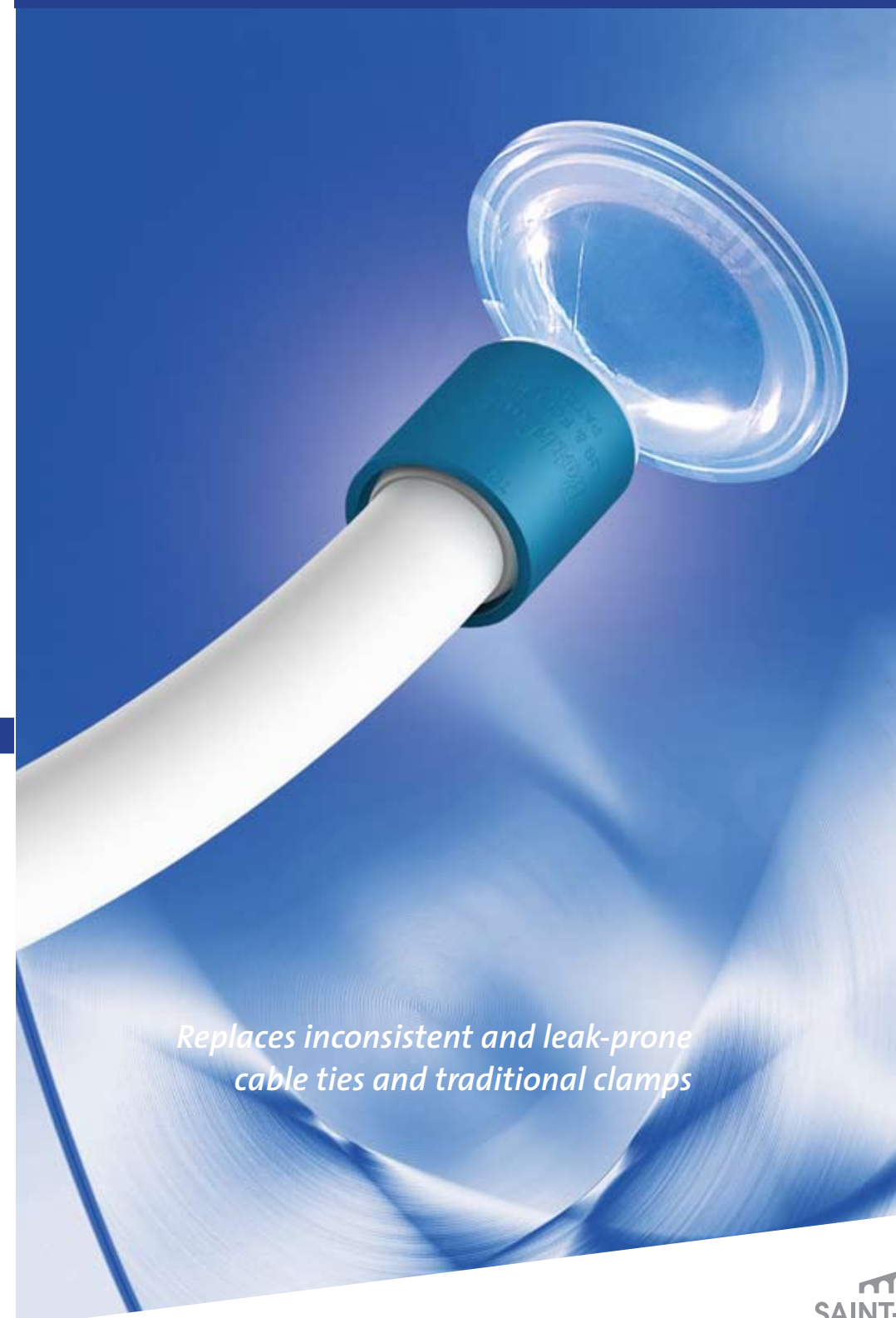


BarbLock®

The Ultra-Secure Tubing Retainer



Replaces inconsistent and leak-prone
cable ties and traditional clamps

BIOPHARMACEUTICAL PRODUCTS MANUFACTURING FACILITIES

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3910 Terry-Diane Street
Beaverton, MI 48612
Tel: (888) 387-0067
Tel: (989) 435-9533
Fax: (989) 435-2355

Saint-Gobain Performance Plastics
700 Warner Blvd.
Taunton, MA 02780
Tel: (800) 722-7106
Tel: (508) 823-7701
Fax: (508) 823-1438

Saint-Gobain Performance Plastics
2664 Gilchrist Road
Akron, OH 44305
Tel: (800) 798-1554
Tel: (330) 798-9240
Fax: (330) 798-6968

Saint-Gobain Performance Plastics
La Mothe-aux-Aulnaies
F-89120 Charny, France
Tel: (33) 3-86-63-78-78
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Saint-Gobain Performance Plastics
4451 110th Avenue North
Clearwater, FL 33762
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Fax: (727) 530-5603

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Nagano 391-0106 Japan
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Bridgewater, NJ 08807
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Consult a Saint-Gobain Performance Plastics Sales Representative for the product and material formulation that best suits your specific application needs.

WWW.BIOPHARM.SAINT-GOBAIN.COM

BarbLock® is a registered trademark of Saint-Gobain Corporation.

WARNING: The content of Saint-Gobain tubing materials is not certified by the FDA for implant devices and is neither designed nor intended to be used in medical applications involving permanent implantation in the human body or permanent contact with body fluids or tissues. Failure to comply with this warning may lead to serious bodily injury or death.

IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics materials for all intended uses. Laboratory, field or clinical tests must be conducted in accordance with applicable requirements in order to determine the safety and effectiveness for use of materials in any particular application. If intended for medical use, it is the user's responsibility to ensure that the materials to be used comply with all applicable medical regulatory requirements.

Limitation of Liability: Except for products for which Saint-Gobain Performance Plastics (SGPPL) has established a specific written warranty, the products described herein are sold by SGPPL without any guarantee and/or warranty, oral or written. User assumes all risk, if any, including the risk of injury, loss or damage, whether direct, consequential or incidental, arising out of the use, misuse or inability to use these products.

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NOTE: Saint-Gobain Performance Plastics Corporation does not assume any responsibility or liability for any advice furnished by it, or for the performance or results of any installation or use of the product or of any final product into which the product may be incorporated by the purchaser and/or user.

For more than four decades, Saint-Gobain Performance Plastics and its family of companies have supplied the world with innovative, high-performance polymer products for the most demanding applications. Our tradition of excellence goes back more than 300 years through our parent company, Compagnie de Saint-Gobain, one of the world's top 100 industrial corporations, with operations in 57 countries. This successful corporation has been built with the single purpose of serving the customer and a commitment to quality and leadership in each of the industries served.

BarbLock® *The Ultra-Secure Tubing Retainer*

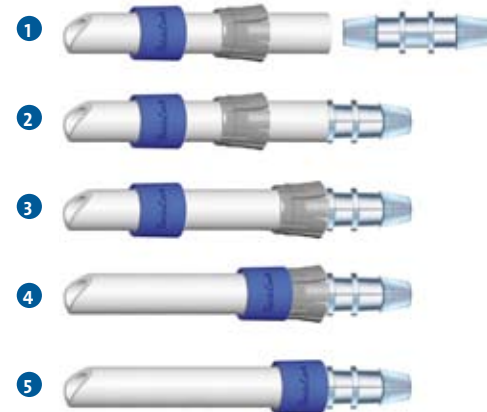
When it comes to retaining flexible tubing and hose onto barbed fittings, the BarbLock® retainer is the most advanced product currently available. BarbLock® is the only retainer with a full 360-degree radial crimp behind the barb and 360 degrees of compression directly over the barb's ridge, a design that solves inherent leak path problems in demanding fluid transfer applications.

BarbLock® retainers are constructed from high-performance polypropylene that meets USP Class VI criteria. They require no adhesives or solvents — making them particularly well suited to systems that handle sensitive liquids and gases — and are available in high temperature materials for thermally demanding environments. The system is also quick and easy to assemble.

BarbLock® retainers have become the standard in many biopharmaceutical, medical and laboratory applications because of their ability to ensure leak-free connections between fittings and tubes.

How BarbLock® Works

1. Load sleeve and collet, leading with ends marked "Top"
2. Install barbed fitting
3. Move collet to base of tube
4. Lower sleeve over collet to pre-locked position
5. Lock assembly with BarbLock® tool



Features/Benefits

- Compatible with all flexible tubing materials
- Full 360° radial crimp behind the barb
- 360° compression directly on the barb's ridge
- Eliminates solvent bonding, ultraviolet bonding and toxic adhesives
- Constructed with USP Class VI materials
- Custom color and identification options available
- Quick and easy to assemble

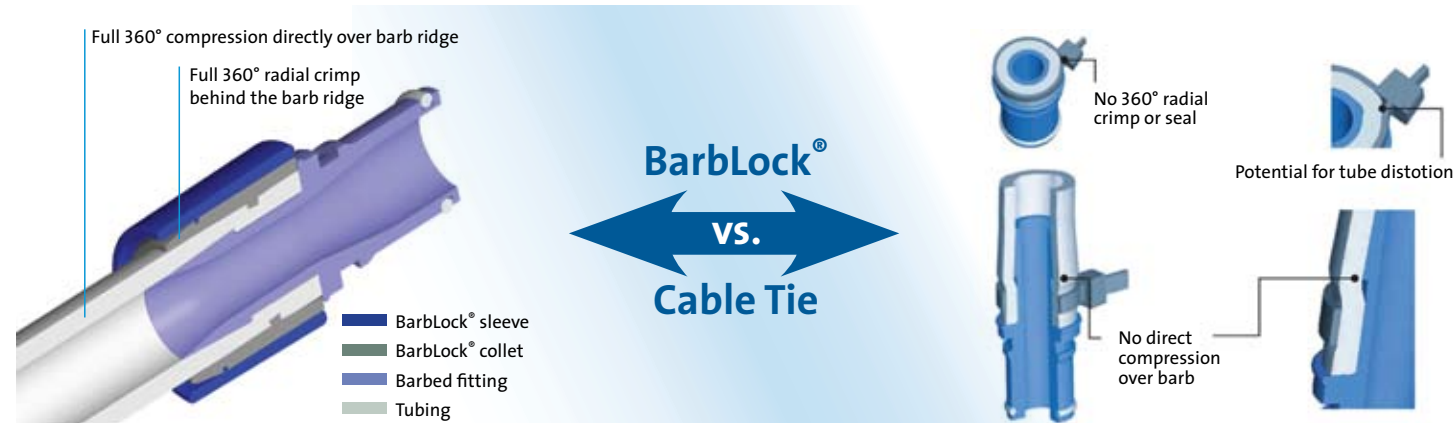
Typical Applications

- Biopharmaceutical transport systems
- Flexible tubing and hose retainers
- Disposable assemblies
- Dialysis equipment
- IV assemblies
- Catheters and cardiovascular

BarbLock® vs. Competing Retainer Systems

Single Retainer	Inherent Leak Path Removed	360° Radial Crimp Behind the Barb	360° Compression Over Barb Ridge	Integral Component Design	Engineered Composite Construction
BarbLock®	Yes	Yes	Yes	Yes	Yes
Cable Tie	No	No	No	No	No
Hose Clamp	No	No	No	No	No
Ear Clamp	No	No	No	No	No

BarbLock® has been tested to 700 PSI/BarbLock® is engineered for each combination of hose and fittings.



Types of BarbLock® Retainers



Standard two-piece retainer

The standard BarbLock® retainer is a two-piece unit consisting of a sleeve and collet.



AL series one-piece retainer

This retainer combines the sleeve and collet into a single unit, and can be automatically loaded into assembly.

Typical Physical Properties

	Nominal Values	Test
MECHANICAL		
Tensile Strength @ Yield, psi (MPa)	4,800	ASTM D638
Tensile Strength @ Break, psi (MPa)	2,000	ASTM D638
Tensile Strength @ Yield	18%	ASTM D638
Tensile Strength @ Break	46%	ASTM D638
Flexural Modulus, psi (MPa)	145,000	ASTM D790
IMPACT		
Notched Izod Impact @ 73°F (23°C)	1.10 ft-lb/in	ASTM D256
Unnotched Izod Impact @ 73°F (23°C)	No Break	ASTM D256
Unnotched Izod Impact @ 0.0°F (-18°C)	3.10 ft-lb/in	ASTM D256
Gander Impact 73°F (23°C), 0.1250 in	153 in-lb	ASTM D3029
HARDNESS		
Rockwell Hardness (R-Scale)	93.0	ASTM D785
THERMAL		
DTUL @ 66 psi – Unannealed	172°	ASTM D1003
OPTICAL		
Haze	9.0%	ASTM D1003

BarbLock® Assembly Options

BarbLock® retainers can be installed quickly and easily using any of the following assembly options.

Tabletops

- Through Bench PAD Tabletop Deluxe — Fully assembled closing unit with sterilizable Poly-Tech top
- Through Bench PAD Walkup — Fully assembled portable closing unit with sterilizable Poly-Tech top / great for bag ports
- Through Bench PAD Table Deluxe — Fabricated from stainless steel, with clean room casters / simple on-site assembly required

Hand-held Assembly Devices

- BLT-PAD — Standard pneumatic assembly device (PAD) / can be hand-held or bench-mounted.
- PBT-PAD-HD — Heavy duty pneumatic assembly device (PAD) / can be hand-held or bench-mounted.

BarbLock® Stock Sizes and Compatibility

Catalog Number	Hose/Tubing O.D.** in. (mm)	Hose/Tubing I.D. in. (mm)	Barbed Fitting in. (mm)
000 SERIES			
BL135062-AL	3/16 (4.8)	1/16 (1.6)	1/16 (1.6)
BL135093-AL	7/32 (5.5)	3/32 (2.4)	3/32 (2.4)
125 SERIES			
BL135125-AL	1/4 (6.4)	1/8 (3.2)	1/8 (3.2)
BL135125	1/4 (6.4)	1/8 (3.2)	1/8 (3.2)
187 SERIES			
BL135187	5/16 (7.9)	3/16 (4.8)	3/16 (4.8)
250 SERIES			
BL135250	3/8 (9.5)	1/4 (6.4)	1/4 (6.4)
BL135251-AL	7/16 (11.1)	1/4 (6.4)	1/4 (6.4)
BL135251	7/16 (11.1)	1/4 (6.4)	1/4 (6.4)
BL135252	1/2 (12.7)	1/4 (6.4)	1/4 (6.4)
375 SERIES			
BL135374	9/16 (14.3)	3/8 (9.5)	3/8 (9.5)
BL135375	5/8 (15.9)	3/8 (9.5)	3/8 (9.5)
500 SERIES			
BL135500	3/4 (19.0)	1/2 (12.7)	1/2 (12.7)
BL135501	3/4 (19.0)	1/2 (12.7)	1/2 (12.7)
625 SERIES			
BL135625-AL	7/8 (22.2)	5/8 (15.9)	5/8 (15.9)
BL135625	7/8 (22.2)	5/8 (15.9)	5/8 (15.9)
750 SERIES			
BL135750-AL	3/4 (19.0)	1-1/4 (31.75)	1-1/4 (31.75)

*When ordering high heat retainers add suffix PVDF to the part number: e.g., BL135500PVDF
 **IMPORTANT NOTE: Hose/Tubing O.D. is the most important number when selecting a retainer size.

Hand Tools

- Stainless steel jaws / plastic handles — For retainer closure
- Stainless steel jaws and handles — For retainer closure
- Disposable plastic (PVDF) — For retainer closure
- Universal removable tool — For retainer removal

These tools are available from Saint-Gobain. For more information, ask your Saint-Gobain sales representative or distributor for the BarbLock® Assembly Options flyer (FLS-abcd).