



C-Flex® Braided Tubing is offered in a complete range of sizes.

## **C-Flex®Braided Tubing**

C-Flex® Braided Tubing is an ultra-flexible, high-purity tubing product developed for use in applications where a thermoplastic tube is desired, but the pressure requirements exceed those allowable by a non-reinforced thermoplastic material. C-Flex® Braided Tubing is manufactured with C-Flex® formula 082, clear, animal derived component free (ADCF) resin and reinforced with polyester braid.

## Characteristics

The manufacturing process is carefully controlled from raw material through production. Inspection and lot traceability information is readily accessible as batch numbers are assigned. All packages are identified by external labeling on both the bag and the high-quality, crush-proof box.

Saint-Gobain Performance Plastics' manufacturing facility has the ability to create a variety of unique color-coded systems, sizes or coil lengths for your particular application needs. For a quote to meet your specific requirement contact our customer service department.

#### **BIOPHARMACEUTICAL PRODUCTS**

# C-Flex® Braided Tubing

## Features/Benefits

- Biopharmaceutical grade
- Pressure rating at five times un-braided materials
- Ultra-flexible, improved bend radius over non-reinforced tubing
- Autoclavable and gamma sterilizable
- Temperature range -45°C to 135°C (-50°F to 275°F)

## **Typical Applications**

- Cell cultures
- Vessel and tank transfer
- Pump applications
- Cold storage

## Biocompatibility

C-Flex® Braided Tubing is manufactured from the finest grade of thermoplastic materials and is fully characterized, validated and tested to a variety of specifications including USP Class VI, ISO 10993 and European Pharmacopoeia. Information on C-Flex bio-comptibility is available to assist in the validation of C-Flex for your application. Contact Saint-Gobain Performance Plastics at (800) 541-6880 or (727) 531-4191 to request a validation package or access to the FDA Drug Master File.



Part Number	ID Inches (mm)	OD Inches (mm)	Wall/inches	Coil Length in Feet	Recommended Working Pressure (PSI at 68°F)	Minimum Bend Radius in Inches
CFB-082-125-2	.125 (3,18)	.355 (9,02)	0.115	25	105	0.5
CFB-082-250-4	.250 (6,35)	.500 (12,70)	0.125	25	110	1.5
CFB-082-375-4	.375 (9,53)	.625 (15,88)	0.125	25	80	2.5
CFB-082-500-4	.500 (12,70)	.750 (19,05)	0.125	15	105	3.5
CFB-082-625-6	.625 (15,88)	1.000 (25,40)	0.187	15	110	4.0
CFB-082-750-6	.750 (19,05)	1.125 (28,58)	0.187	15	110	5.5

## **C-Flex®** Braided Tubing Typical Physical Properties

Property	ASTM Method	Value or Rating	
Durometer Shore A Hardness	D2240		
Specific Gravity	D792	0.9	
Tensile Strength, psi	D412	900	
Elongation at Break, %	D412	740	
Tensile Modulus, psi @100% @300%	D412	240 400	
Graves Tear Strength, lbf/in	D624	150	

### **Sterilization Methods**

Autoclavable Radiation - up to 4Mrad (40 kGy) Gas - Ethylene Oxide

NOTE: C-Flex® Braided tubing will deteriorate with repeated autoclaving. Radiation is the recommended method of sterilization for all C-Flex® thermoplastic materials.

#### **BIOPHARMACEUTICAL PRODUCTS**

Come through clean.™

# Characterization

The bio-compatibility of C-Flex® thermoplastic resin used to manufacture braided C-Flex has been tested and complies with the parameters set forth in the following test protocols:

- USP VI (pre- & post-gamma)
- Cytotoxicity
- · Hemolysis
- Ames Genotoxicity
- European Pharmacopoeia 3.2.9
- Bacterial Endotoxin
- USP Physicochemical for Plastics
- USP Elastomeric CLosures for Injection
- Rabbit Pyrogen
- Bacteriostasis Fungistasis
- Total Organic Carbon

## Distributed by:



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C-FLEX® TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL

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

For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics Corporation warrants this product to be free from defects in materials and workmanship. Our only obligation will be to replace any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risk, if any, including the risk of injury, loss or damage, direct or consequential, arising out of the use, misuse, or inability to use, this product. THIS WARRANTY IS IN LIEU OF THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. No deviation is authorized.

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