



Tygon® MPF-100 Tubing for Medical Device Manufacturers

Tygon® MPF-100 Tubing

TYGON® MPF-100 is a medical grade, clear non-PVC polymer available directly from Saint-Gobain. This flexible tubing is designed to replace PVC in medical devices where DEHP plasticizers and leachables are not desired. TYGON® MPF-100 has excellent chemical resistance and is ideally suited for fluid and oxygen administration applications.

Biocompatibility

TYGON® MPF-100 is a biocompatible polymer tubing designed specifically for medical applications and tested to ISO 10993 and meets the requirements of the USP <88>, Plastic Class VI. This tubing is non-pyrogenic and non-toxic in Systemic Toxicity, Intracutaneous Reactivity, Cytotoxicity, Hemocompatibility and Intramuscular Implant tests.

PVC Replacement Tubing – The Right Choice

Increasing concerns in Europe and North America regarding health hazards and environmentally friendly disposal of DEHP plasticizers led to the development of the MPF product line. These products are non-PVC and are not made with DEHP, and can be disposed of without harmful effects on the environment.

Important: “This Saint-Gobain product is a medical component intended for processing or use in the manufacture or assembly of medical devices before the finished medical device is packaged/ labeled; it is intended to be included as part of the finished, packaged, and labeled device [21CFR820.3(c)]. Please refer to our Medical Products Disclaimer at www.medical.saint-gobain.com/resources/regulatory-and-quality/medical-product-disclaimer.
Caution: For manufacturing, processing or repackaging”

Features/Benefits

- PVC replacement - Tubing not made with plasticizers
- EtO and gamma sterilizable
- Environmentally safe disposal
- Excellent chemical resistance
- Meets USP <88>, Plastic Class VI Criteria

Typical Applications

- Fluid administration
- Oxygen administration

TYGON® MPF-100 Typical Physical Properties*

Property	ASTM Method	Value or Rating
Durometer Hardness (Shore A), 15 sec.	D2240-02	87
Tensile Strength, psi (MPa) (at break)	D412-98	1,655 (17.3)
Ultimate Elongation, %	D412-98	550
Tensile Modulus @ 100% elongation, psi (MPa)	D412-98	14,401 (5.9)
Tensile Set, %	D412-98	410
Tear Resistance, lb-f/inch (kN/m)	D1004-94	402 (68.3)
Compression Set, Constant Deflection % @ 158°F (70°C) for 22 hours	D395-02 Method B	32
Brittle Temperature, °F (°C)	D746-98	-100 (-73)
Specific Gravity	D792-02	0.9
Water Absorption, % 24 hours at 73°F (23°C)	D570-98	0
Maximum Recommended Operating Temperature °F (°C)	n/a	150 (66)
Color	n/a	Clear

* Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick extruded strip or 0.075" thick molded ASTM plaques or molded ASTM durometer buttons.

TYGON® MPF-100 Relative Chemical Resistance Properties**

Acids	Bases	Salts	E
concentrated F	concentrated E	Alcohols	E
medium E	medium E	Ketones	E
weak E	weak E		

E=Excellent, F=Fair, U=Unsatisfactory

** All tests conducted at room temperature

Hydrocarbons

Aliphatic	F
Aromatic	U
Halogenated	U



TYGON® MPF-100 Product Characteristics

ISO 10993 - Cytotoxicity	Non-cytotoxic
ISO 10993 - Hemocompatibility	Non-hemolytic
ISO 10993 - Pyrogens	Non-pyrogenic
USP <88>, Plastic Class VI	Meets criteria

TYGON® MPF-100 Sterilization Methods

Autoclavable	No
Gas	Yes
Radiation	Yes (2.5 MRad)

TYGON® is a registered trademark.



Saint-Gobain Performance Plastics

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

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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