

TYGON®

MPF-100 Tubing

Medical Products

Medical Grade, Plasticizer-free Tubing

Features/Benefits

- PVC replacement -
No plasticizers or leachables
- EtO and gamma sterilizable
- USP Class VI approved
- Environmentally safe disposal
- Excellent chemical resistance

Typical Applications

- Fluid administration
- Oxygen administration

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 USP Class VI criteria. 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, do not contain DEHP, and can be disposed of without harmful effects on the environment.

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	2,500 (17.3)
Ultimate Elongation, %	D412-98	500
Tensile Modulus @ 100% elongation, psi (MPa)	D412-98	850 (5.9)
Tensile Set, %	D412-98	410
Tear Resistance, lb-f/inch (kN/m)	D1004-94	390 (68.3)
Compression Set, Constant Deflection % @ 158°F (70°C) for 22 hours	D395-02 Method B	79
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	< 0.01
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		
Hydrocarbons			
		Aliphatic	F
		Aromatic	U
		Halogenated	U

E=Excellent, F=Fair, U=Unsatisfactory

** All tests conducted at room temperature



TYGON® MPF-100 Product Characteristics

ISO 10993 – Cytotoxicity	Pass
ISO 10993 – Hemocompatibility	Pass
ISO 10993 – Pyrogens	Pass
USP Class VI	Pass

TYGON® MPF-100 Sterilization Methods

Autoclavable	Yes
Gas	Yes
Radiation	Yes (2.5 MRad)

TYGON® tubing is not intended for use as an implant material.

TYGON® is a registered trademark.



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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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