

SAINT-GOBAIN MEDICAL

# TYGON<sup>®</sup> MPF-100

## Tubing for Medical Device Manufacturers

Tygon<sup>®</sup> MPF-100 tubing is a 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 CHARACTERISTICS

Tygon MPF-100 is a biocompatible polymer tubing designed specifically for medical applications and has met the requirements of Biological Test for Plastics, Class VI, as described in USP <88> (2017; fluid path).

### 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. Tygon MPF-100 is designed and manufactured without the intentional addition of DEHP.

**TYGON<sup>®</sup>**  
Trusted Performance

### FEATURES/BENEFITS

- PVC replacement - Tubing not made with plasticizers
- Excellent chemical resistance
- Tygon MPF-100 has met the requirements of Biological Test for Plastics, Class VI, as described in USP <88> (2017; fluid path)

### TYPICAL APPLICATIONS

- Diagnostic reagent transfer
- Fluid administration
- Oxygen administration

Product recommendations are based on a combination of industry knowledge, material science expertise, and/or material testing data. Contact Saint-Gobain Medical for further tubing recommendation information.

  
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## TYGON® MPF-100 TUBING TYPICAL PHYSICAL PROPERTIES<sup>†</sup>

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

<sup>†</sup>Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick extruded strips, 0.075" thick molded ASTM plaques or molded ASTM durometer buttons.

## TYGON® MPF-100 TUBING TUBING STERILIZATION METHODS

**Physical properties are not significantly impacted by the following sterilization methods:**

- Gas - EtO (Ethylene Oxide)
- Radiation (25 kGy/2.5 Mrad)

## TYGON® MPF-100 TUBING RELATIVE CHEMICAL RESISTANCE PROPERTIES<sup>\*\*</sup>

Acids		Bases	
concentrated	F	concentrated	E
medium	E	medium	E
weak	E	weak	E
Hydrocarbons		Salts	
Aliphatic	F	Alcohols	E
Aromatic	U	Ketones	E
Halogenated	U		

E=Excellent, F=Fair, U=Unsatisfactory  
<sup>\*\*</sup>All tests conducted at room temperature

## TYGON® MPF-100 TUBING TUBING CHARACTERISTICS

**Tygon MPF-100 has met the following test requirements:**

- Plastic Class VI, as described in USP <88> (2017)

NOTE: The information provided pertains only to product manufactured at the Saint-Gobain Akron, Ohio facility. Saint-Gobain Performance Plastics Corporation's Life Science ("Saint-Gobain") products that are used as components in the manufacture of any Medical Devices (as defined by the FDA) are sold by Saint-Gobain only and exclusively to Medical Device manufacturers for use in the manufacture, assembly or distribution of their medical devices. Medical Device manufacturers, to whom Saint-Gobain sells components or for whom Saint-Gobain acts as a subcontractor for finished products, are solely responsible for determining whether their finished products are a medical device and complying with the appropriate certifications and registrations.

**This document is intended to provide information about the product to enable you to consider whether generally the Product meets your application need and is not intended to provide product specification. This document should not be considered a Product warranty or guaranty. To the extent this document mentions any tests done by Saint-Gobain, such tests are done under controlled laboratory circumstances and hence other factors in your use and application may impact such values.**

