

# Tygon<sup>®</sup> MPF-300+ TUBING

FOR MEDICAL DEVICE MANUFACTURERS

## TYGON<sup>®</sup> MPF-300+ TUBING

TYGON<sup>®</sup> MPF-300+ is a clear, medical grade polymer not formulated with PVC or DEHP. Our Tygon tubing formulation is made in an ISO Class 7 cleanroom to meet your medical application needs. This flexible tubing is designed to replace PVC in medical devices in which DEHP plasticizers and leachables are not desired. TYGON MPF-300+ has excellent bonding strength and is ideally suited for fluid and oxygen administration applications.

## BIOCOMPATIBILITY

TYGON MPF-300+ is a biocompatible polymer developed specifically for medical applications and tested to various elements of ISO 10993 including hemocompatibility, implantation, irritation and skin sensitization, systemic toxicity, and cytotoxicity.

## PVC ALTERNATIVE 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 300+ products are not formulated with PVC or DEHP, and can be disposed of without harmful effects on the environment.

## FEATURES & BENEFITS

- Made in ISO Class 7 Cleanroom
- PVC alternative
- Tubing is not made with plasticizers
- EtO and gamma sterilizable
- Environmentally safe disposal
- Excellent bonding to plastic connectors
- Meets criteria of various ISO 10993 tests

## TYPICAL APPLICATIONS

- Fluid administration
- Oxygen administration

# TYGON® MPF-300+ TUBING

## TYPICAL PHYSICAL PROPERTIES OF TYGON® MPF-300+\*

Property	ASTM Method	Value or Rating
Durometer Hardness (Shore A), 15 sec.	D2240-02	83
Tensile Strength, psi (MPa) (at break)	D412-98	3,595 (41.4)
Ultimate Elongation, %	D412-98	553
Tear Resistance, lb-f/inch (kN/m)	D624-91, Die C	509 (83.1)
Compression Set, Constant Deflection % @ 158°F (70°C) for 22 hours	D395-02, Method B	29
Brittle Temperature, °F (°C)	D746-98	< -112 (-80)
Specific Gravity	D792-02	1.11
Water Absorption, % 24 hours at 73°F (23°C)	D570-98	1.13
Maximum Recommended Operating Temperature °F	n/a	180 (82)
Tensile Modulus, @ 100 % Elongation, psi (MPa)	D412-98	1,546
Color	n/a	Transparent Natural

\*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-300+ PRODUCT CHARACTERISTICS

Tygon® MPF-300+ tubing has met the following test requirements:

- Hemolysis, as described in ISO 10993-4 (fluid path only)
- Cytotoxicity, as described in ISO 10993-5
- Implantation, as described in ISO 10993-6
- Skin Sensitization, as described in ISO 10993-10 (fluid path only)
- Acute Systemic Toxicity, as described in ISO 10993-11
- Irritation, as described in ISO 10993-23

## TYGON MPF-300+ STERILIZATION METHODS

EtO	Yes
Gamma	Yes (25 kGy)

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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 to the extent they determine that the finished products are medical device, the Medical Device manufacturers are obligated to be compliant with all applicable regulations and to ensure that it has received proper country-specific clearance, certification or registration authorizing the sale of such medical devices.

**NOTE:** 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. Saint-Gobain strongly recommends that you conduct practical tests simulating the conditions of your application to ensure that the product meets your requirements for your specific application.

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