

# Tygon® MPF-300 TUBING

FOR MEDICAL DEVICE MANUFACTURERS

## TYGON® MPF-300 TUBING

TYGON® MPF-300 is a clear, medical grade polymer not formulated with PVC or DEHP. 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

- 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

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## 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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