

TYGON®

MEDICAL TUBING FORMULATION S-54-HL

A Stiffer Version of Formulation S-50-HL For Special Applications

FEATURES/BENEFITS:

- Meets USP Class VI Criteria
- Compatible With Blood
- Clear, With a Glass-Smooth Bore
- Reduced Flexibility for Suction Applications

Tygon® S-54-HL is flexible, but has sufficient rigidity to eliminate danger of wall collapse in suction applications.



MEETS SPECIAL REQUIREMENTS

Introduced in 1964, Tygon® S-54-HL is a variation of S-50-HL that has been stiffened to reduce kinking problems experienced in some applications such as draining blood from the body to a perfusion reservoir.

MICRO-BORE SIZES

Tygon S-54-HL is available in five extremely small sizes for use in catheters, for intravenous or intra-arterial infusion and other surgical and hospital uses. It is stiff enough for easy handling, yet soft enough to reduce problems of puncturing.

FABRICATION

Since Tygon S-54-HL is thermoplastic in nature, it can be fabricated into cannulas or protective sheath products using thermoforming and flaring techniques.

CLASS VI RATING

As with Tygon S-50-HL, an extensive evaluation program assures that Tygon S-54-HL is qualified to meet or exceed Class VI criteria. A Class VI rating means that the formulation has passed the Class VI test protocol listed in the U.S. Pharmacopeia.

S-54-HL is non-toxic, non-pyrogenic, odorless and non-hemolytic. Its smooth, dense bore prevents build-up and provides outstanding flow characteristics.

STERILIZATION METHODS: CHEMICAL STERILIZATION

Tygon's exceptional chemical resistance characteristics ideally suit it for sterilizing with any of a wide number of germicides. Completely immerse the tubing in the solution for at least 30 minutes, then flush with a saline solution.

GAS STERILIZATION

Tygon tubing may be sterilized in a gas sterilizer using gases based on ethylene oxide. Operation of the gas sterilizer should follow precisely the manufacturer's recommended procedures.

GAMMA STERILIZATION

Tygon S-54-HL is radiation sterilizable by a cobalt 60 source up to 4 megarads.

TYPICAL PHYSICAL PROPERTIES* S-54-HL

Property	Value or Rating
Color	Crystal Clear
Durometer Hardness, Shore A	80
Tensile Strength, psi	2,700
Low Temperature Range	Flexible at 10°F Brittle at -25°F
High Temperature Range Dry Heat Steam Heat (Autoclave)	200°F 30 min. at 15 psi
Elongation, %	320%
Oder	None
Taste	None
Toxicity	Non-toxic

* When tested as tubings, values may vary depending on the cross-sectional area tested.

STANDARD SIZES					
Tubing I.D. (Inches)	.050	.040	.030	.020	.010
Tubing O.D (Inches)	.090	.070	.090	.060	.030
**Needle Gauge	18	19	21	23	30
French Size	7	6	7	5	3

** Needle fits into tubing

TYGON® TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL

TYGON MICRO-BORE TUBING (Inventoried sizes)

Inside Diameter		Outside Diameter		Wall Thickness		Needle Gauge
Inches	mm	Inches	mm	Inches	mm	
.010	.25	.030	.76	.010	.25	30
.020	.51	.060	1.52	.020	.51	23
.030	.76	.090	2.29	.030	.76	20-21
.040	1.02	.070	1.78	.010	.38	18-20
.050	1.27	.090	2.29	.020	.51	17-18

Other sizes available by quotation.

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SAINT-GOBAIN PERFORMANCE PLASTICS

P.O. Box 3660
Akron, OH 43309-3660
Phone: 330-798-9240 800-798-1554
Fax: 330-798-6968
www.plastics.saint-gobain.com



Important: It is the user's responsibility to ensure the suitability and safety of Health Markets Business 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.

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