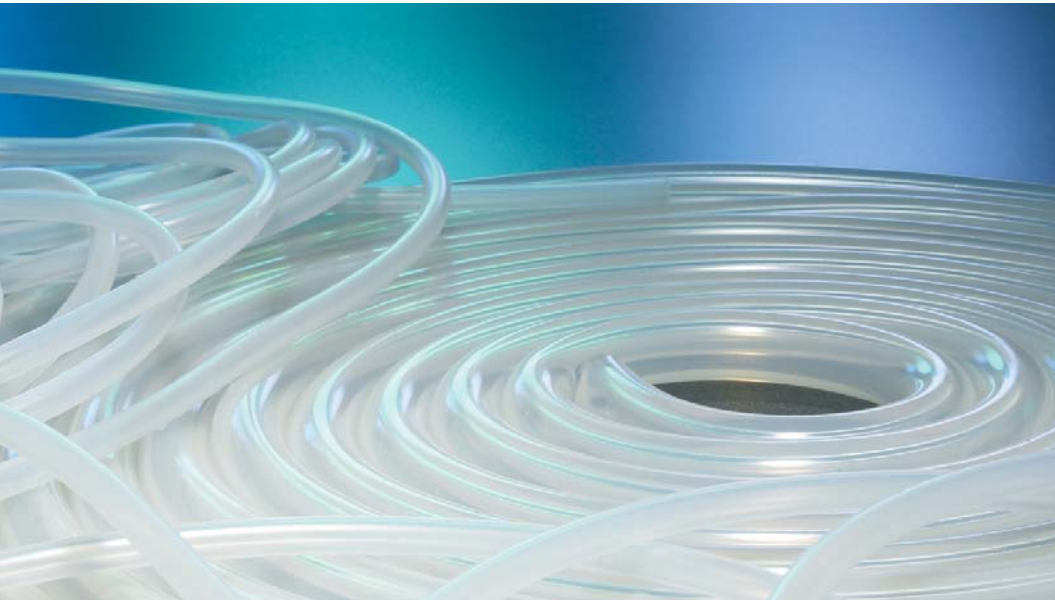


TYGON® 3360LA Low Absorption Tubing



TYGON® 3360LA

TYGON® 3360LA is a premium, low absorption, platinum-cured silicone tubing especially developed for biotechnology, pharmaceutical, healthcare and laboratory applications. This tubing answers the need for a fluid transport vehicle that would help optimize performance by reducing the propensity for sorption.

TYGON® 3360LA tubing has an absorption rate lower than any elastomeric tubing currently in use, thereby making it a viable alternative when fluid integrity must be maintained. Since TYGON® 3360LA minimizes the removal of preservatives during the manufacturing process, optimum product integrity is assured.

Characteristics

Because the tubing is platinum-cured, it possesses the unique properties of a smooth inner bore, low absorption of elements, and optimal physical characteristics. This ensures that the common preservatives Meta-Cresol, Benzyl Alcohol, Methyl Paraben, and Phenol are optimized in process.

To ensure quality manufacture of TYGON® 3360LA, each incoming lot of raw material used to produce Saint-Gobain platinum-cured silicone undergoes complete physical testing. TYGON® 3360LA tubing is produced under the most rigorous standards for industries in which product integrity cannot be compromised.

Biocompatibility

TYGON® 3360LA silicone tubing complies fully with the requirements of the USP XXIV Class VI criteria. In addition, TYGON® 3360LA silicone tubing meets FDA 21 CFR Part 177.2600 criteria for use in food contact applications.

To ensure the continued quality of TYGON® 3360LA, the following tests are performed annually: USP Class VI biological compliance; Total Extractables (per 21 CFR 177.2600); Cytotoxicity; Hemolytic Compatibility; Pyrogen Tests and Physicochemical Tests for Elastomeric Closures. TYGON® 3360LA has a masterfile with the U.S Food and Drug Administration.

BIOPHARMACEUTICAL PRODUCTS

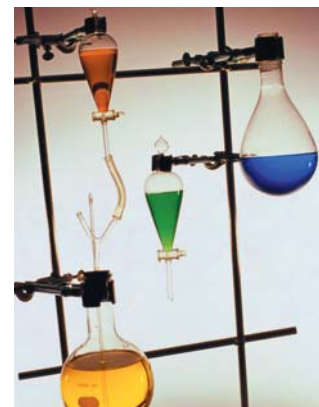
Retains optimum preservative structure for process integrity

Features/Benefits

- Reduces Preservatives Removal— Exhibits Lower Absorption Rates
- Tubing Structure is Translucent for Fluid Inspection
- Great Peristaltic Pump Life Characteristics

Typical Applications

- Drug Processing
- Insulin Production
- Drug Therapy
- Chemical Synthesis
- Experimental Procedures



TYGON® 3360LA Typical Physical Properties

Property	ASTM Method	Value or Rating	Post Autoclave 5 cycles @ 126°C for 120 min.
Durometer Hardness Shore A, 15 Sec.	D2240-97	63	63
Tensile Strength, psi (MPa)	D412-97	1200	1156
Ultimate Elongation, %	D412-97	430	388
Tensile Modulus @ 100% psi (MPa)	D412-97	262 ps (2.6)	277
Color	—	Translucent	
Tear Resistance lb-f/inch (kN/m)	D624-91 Die B	(23.6) 150	
Specific Gravity	D792-91	1.12	
Water Absorption, %, 24 hours @ 23°C	D570-95	+0.10	
Brittleness By Impact Temp.	D746-95	Lower than -80°C	
Maximum Recommended Operating Temp., °F (°C)	—	400 (204)	

TYGON® 3360LA Tubing Inventoried Sizes

Part Number	Tubing Sizes	Length (feet)
F90000	1/8 x 1/4	50'
F90001	3/16 x 5/16	50'
F90002	3/16 x 3/8	50'
F90003	1/4 x 3/8	50'
F90004	1/4 x 1/2	50'
F90005	5/16 x 7/16	50'
F90006	3/8 x 1/2	50'
F90007	3/8 x 5/8	50'
F90008	1/2 x 5/8	50'
F90009	1/2 x 3/4	50'

TYGON® is a registered trademark.

TYGON TUBING IS NOT INTENDED FOR USE AS AN IMPLANT MATERIAL

BIOPHARMACEUTICAL PRODUCTS

Come through clean.™


SAINT-GOBAIN
PERFORMANCE PLASTICS

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.

Saint-Gobain Performance Plastics Corporation assumes no obligations or liability for any advice furnished by it, or for results obtained with respect to those products. All such advice is given and accepted at the buyer's risk.

FLS-3178-oM-1004-SGCS

©2005 Saint-Gobain Performance Plastics Corporation

Test Analysis: Standard Laboratory Test Method GD-20 "Determination of Drug Preservatives in Water Using Gad Chromatography"

Solution Volume: 100 ml

Preservatives Tested:

BA=Benzyl Alcohol
P=Phenol
C=M-Cresol
MP=Methyl Paraben

Results: The results were calculated using the method formula expressed as "% preservative remaining in solution after each time period." These results are found in the table below.

Results of Tests (% Remaining)

Species # Name	1 benzyl alcohol	2 phenol	3 m-cresol	4 methyl paraben
000057-01				
t=0 hours	(100)	(100)	(100)	(100)
t=2	105	100	87	100
t=4	105	103	84	111
t=6	94	91	69	96
t=24	83	72	47	94
t=48	67	50	31	69
t=72	54	34	19	88

