

TYGON® UV Resistant Tubing



Tygon® UV Resistant Tubing protects light-sensitive fluids while resisting degradation from ozone and ultraviolet light.

Versatility in Chemical Resistance

Ideal for virtually any permanent or temporary chemical transfer application, Tygon® UV Resistant Tubing combines suppleness and flexibility with resistance to a wide range of chemicals. It shows exceptional resistance to strong acids and many alkalies.

The flexibility of Tygon® UV Resistant Tubing also makes it quick and easy to put into service, providing considerable savings on installation time and cost when compared to rigid piping systems.

Outstanding Weatherability

Black in color, it is resistant to ultraviolet light, ozone and weathering, making it ideal for many outdoor applications. Standard inventoried sizes of Tygon® UV Resistant Tubing have sufficient wall thickness to block transmission of all UV light.

Excellent Burn Resistance

Tygon® UV Resistant Tubing will meet UL 94V-0 and UL 94HB flammability ratings. Specifying Tygon® UV Resistant Tubing for use in equipment that requires specific burn characteristics can help to simplify the approval process.

FORMULATION R-3400

*Remains flexible
in ultraviolet
environments*

Features/Benefits

- Black in color, protects light-sensitive fluids
- Wide range of chemical resistance
- Ozone resistant
- Excellent burn resistance
- Low compression set; resists permanent deformation
- Available in clear formulation for fluid flow monitoring

Typical Applications

- Acid and caustic transfer
- Corrosive diffusible gases
- Fertilizer and pesticide dispensing
- Electrical insulation lines
- Ink and adhesive dispensing
- General maintenance

TYGON® R-3400 Inventoried Sizes

Saint-Gobain Part Number	I.D. (inches)	O.D. (inches)	Wall Thickness (inches)	Length (feet)	Minimum Bend Radius	Max. Working Pressure at 73°F (psi) (inches)	Vacuum Rating, In. of Mercury at 73°F
AAE00002	1/16	1/8	1/32	50	1/4	60	29.9
AAE00004	3/32	5/32	1/32	50	3/8	45	29.9
AAE00005	3/32	7/32	1/16	50	1/4	80	29.9
AAE00007	1/8	1/4	1/16	50	3/8	60	29.9
AAE00010	5/32	9/32	1/16	50	1/2	50	29.9
AAE00011	3/16	1/4	1/32	50	1	25	11.0
AAE00012	3/16	5/16	1/16	50	5/8	45	29.9
AAE00013	3/16	3/8	3/32	50	1/2	60	29.9
AAE00017	1/4	3/8	1/16	50	1	35	25.0
AAE00018	1/4	7/16	3/32	50	3/4	50	29.9
AAE00022	5/16	7/16	1/16	50	1-3/8	30	16.0
AAE00027	3/8	1/2	1/16	50	1-3/4	25	11.0
AAE00029	3/8	5/8	1/8	50	1-1/8	45	29.9
AAE00032	7/16	9/16	1/16	50	2-1/4	20	8.0
AAE00038	1/2	3/4	1/8	50	1-3/4	35	25.0
AAE00046	5/8	7/8	1/8	50	2-3/8	30	16.0
AAE00053	3/4	1	1/8	50	3-1/4	25	11.0

*Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM D1599.

The values listed for working and burst pressures are derived from tests conducted under controlled laboratory conditions. Many factors will reduce the tubing's ability to withstand pressures including temperature, chemical attack, stress, pulsation and the attachment to fittings. It is imperative that the user conduct tests simulating the conditions of the application prior to specifying the tubing for use.

TYGON® R-3400 Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness Shore A, 15 Sec	D2240-02	64
Color	-	Black
Tensile Strength psi (MPa)	D412-98	2250 (15.5)
Ultimate Elongation, %	D412-98	350
Tear Resistance lb-f/inch (kN/m)	D1004-94	185 (32)
Specific Gravity	D792-00	1.31
Water Absorption, % 24 hrs. @ 23°C	D570-98	0.19
Compression Set Constant Deflection, % @ 158°F (70°C) for 22 hrs.	D395-02 Method B	64
Brittleness By Impact Temp., °F (°C)	D746-98	-6 (-21)
Maximum Recommended Operating Temp., °F (°C)	-	165 (74)
Dielectric Strength v/mil (kV/mm)	D149-97	490 (19.3)
Tensile Modulus, @ 100% Elongation, psi (MPa)	D412-98	1,000 (6.9)
Tensile Set, %	D412-98	56

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® is a Saint-Gobain Performance Plastics registered trademark.

Saint-Gobain Performance Plastics

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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.

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