TYGON® LMT-55

Let the Evolution Begin

NON-DEHP
LABORATORY AND
VACUUM TUBING

SAINT-GOBAIN

Features/Benefits

- The new non-DEHP formulation delivers the same excellent performance
- Outstanding chemical resistance
- Lot-to-lot consistency for reproducible results
- Increases productivity in peristaltic pumps – outlasts other clear tubing 2 to 1
- Non-oxidizing and non-contaminating
- Smooth, polished inner wall
- Slips easily over fittings and grips securely for simple lab set-ups
- Contains no BPA
- Standard sizes available to hold full vacuum at room temperature

Typical Applications

- General laboratory
- Analytical instruments
- Peristaltic and vacuum pumps
- Ideal for condensers, incubators, desiccators, gas lines and drain lines

TYGON® LMT-55 Non-DEHP Tubing Typical Physical Properties

Property	ASTM Method	Value or Rating
Durometer Hardness Shore A, 15 Sec	D2240-02	55
Color	–	Clear
Tensile Strength, psi (MPa)	D412-98	1,650 (11.4)
Ultimate Elongation, %	D412-98	450
Tear Resistance, lb-f/inch (kN/m)	D1004-94	125 (22)
Specific Gravity	D792-00	1.18
Water Absorption, % 24 hrs. @ 23˚C	D570-98	0.24
Compression Set Constant Deflection, % @ 158˚F (70˚C) for 22 hrs.	D395-01 Method B	61
Brittleness By Impact Temp., ˚F (˚C)	D746-98	-58 (50)
Maximum Recommended Operating Temp., ˚F (˚C)	–	165 (74)
Dielectric Strength, v/mil (kV/mm)	D149-97	608 (23.9)
Tensile Modulus, at 100% elongation psi (MPa)	D412-98	650 (4.5)
Tensile Set, %	D412-98	107

Unless otherwise noted, all tests were conducted at room temperature (73˚F/23˚C). Values shown were determined on 0.075"/1.9 mm thick extruded strip or 0.075"/1.9 mm thick molded ASTM plaques or molded ASTM durometer buttons.

TYGON® LMT-55

NON-DEHP LABORATORY AND VACUUM TUBING

Let the Evolution Begin

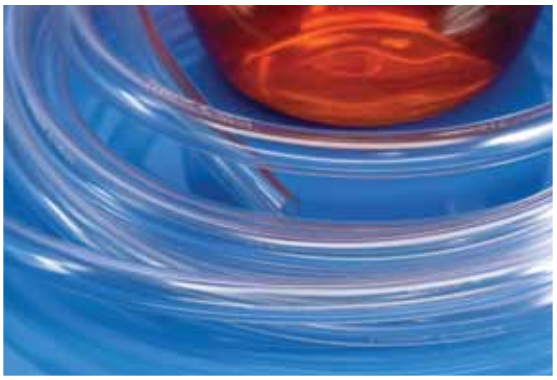
Crystal clear and flexible, long-lasting and crack-resistant, new TYGON® LMT-55 Non-DEHP Laboratory and Vacuum Tubing delivers the same superior performance you've come to expect, but now in a formulation that contains a non-DEHP plasticizer. Replacing DEHP with a globally accepted substitute eliminates concerns about potentially harmful health effects from repeated exposure to high levels of DEHP leachates.

TYGON® LMT-55 Laboratory Tubing handles most inorganic chemicals found in the laboratory. It is non-oxidizing and non-contaminating, and less permeable than rubber tubing. The glassy-smooth inner bore helps prevent buildup to facilitate cleaning, and coils are marked at 1-foot (30.4 cm) intervals for easy measuring.

TYGON® LMT-55 Laboratory Tubing may be safely sterilized by autoclaving and, due to its excellent chemical resistance, may also be sterilized chemically or by gas (ethylene oxide).

Engineered to Last

TYGON® LMT-55 Laboratory Tubing is specially formulated for resistance to flex-fatigue and abrasion. In many peristaltic pump applications, it will outlast its nearest competitor by at least 2 to 1. As a tubing for instrumentation connection, vent, drain and other general laboratory applications, TYGON® LMT-55 Laboratory Tubing offers superior life, which minimizes the labor and expense of replacement.



Available in Vacuum Tubing Sizes

TYGON® LMT-55 Vacuum Tubing has extra heavy walls that will withstand a full vacuum at room temperature (29.9" [759mm] of mercury at 73˚F [23˚C] and up to 27" [686mm] of mercury at 140˚F [60˚C]). Like standard TYGON® Laboratory Tubing, TYGON® LMT-55 Vacuum Tubing resists most inorganic chemicals and can be used in corrosive atmospheres.

TYGON® LMT-55 Non-DEHP Tubing Available Sizes

Saint-Gobain Part Number	I.D.		O.D.		Wall Thickness		Length		Minimum Bend Radius		Maximum Working Pressure		Vacuum Rating of Mercury at	
	In.	mm	In.	mm	In.	mm	Ft.	m	In.	mm	psi at 73°F*	bars at 23°C*	inches at 73°F	mm at 23°C
ALH00001	1/32	0.8	3/32	2.4	1/32	0.8	50	15	1/8	3.2	80	5.5	29.9	760
ALH00002	1/16	1.6	1/8	3.2	1/32	0.8	50	15	1/4	6.4	45	3.1	29.9	760
ALH02002	1/16	1.6	1/8	3.2	1/32	0.8	100	30.5	1/8	3.2	45	3.1	29.9	760
ALH04002	1/16	1.6	1/8	3.2	1/32	0.8	500	152	1/8	3.2	45	3.1	29.9	760
ALH00003	1/16	1.6	3/16	4.8	1/16	1.6	50	15	1/8	3.2	75	5.2	29.9	760
ALH00004	3/32	2.4	5/32	4.0	1/32	0.8	50	15	3/8	9.5	30	2.0	29.9	760
ALH02004	3/32	2.4	5/32	4.0	1/32	0.8	100	30.5	3/8	9.5	30	2.0	29.9	760
ALH00005	3/32	2.4	7/32	4.0	1/16	1.6	50	15	1/4	6.4	55	3.8	29.9	760
ALH00006	1/8	3.2	3/16	4.8	1/32	0.8	50	15	1/2	12.7	25	1.7	20	508
ALH04006	1/8	3.2	3/16	4.8	1/32	0.8	500	152	1/2	12.7	25	1.7	20	508
ALH00007	1/8	3.2	1/4	6.4	1/16	1.6	50	15	3/8	9.5	45	3.1	29.9	760
ALH02007	1/8	3.2	1/4	6.4	1/16	1.6	100	30.5	3/8	9.5	45	3.1	29.9	760
ALH04007	1/8	3.2	1/4	6.4	1/16	1.6	500	152	3/8	9.5	45	3.1	29.9	760
ALH00009	5/32	4.0	7/32	5.6	1/32	0.8	50	15	3/8	9.5	20	1.4	12	305
ALH00010	5/32	4.0	9/32	7.1	1/16	1.6	50	15	1/2	12.7	35	2.4	29.9	760
ALH02010	5/32	4.0	9/32	7.1	1/16	1.6	100	30.5	1/2	12.7	35	2.4	29.9	760
ALH00011	3/16	4.8	1/4	6.4	1/32	0.8	50	15	1	25.4	20	1.4	9	229
ALH00012	3/16	4.8	5/16	7.9	1/16	1.6	50	15	5/8	15.9	30	2.0	29.9	760
ALH02012	3/16	4.8	5/16	7.9	1/16	1.6	100	30.5	5/8	15.9	30	2.0	29.9	760
ALH04012	3/16	4.8	5/16	7.9	1/16	1.6	500	152	5/8	15.9	30	2.0	29.9	760
ALH00013	3/16	4.8	3/8	9.5	3/32	2.4	50	15	1/2	12.7	40	2.8	29.9	760
ALH00014	3/16	4.8	7/16	11.1	1/8	3.2	50	15	3/8	9.5	55	3.8	29.9	760
ALH00016	1/4	6.4	5/16	7.9	1/32	0.8	50	15	1-5/8	41.3	15	1.0	5	127
ALH00017	1/4	6.4	3/8	9.5	1/16	1.6	50	15	1	25.4	25	1.7	20	508
ALH02017	1/4	6.4	3/8	9.5	1/16	1.6	100	30.5	1	25.4	25	1.7	20	508
ALH04017	1/4	6.4	3/8	9.5	1/16	1.6	500	152	1	25.4	25	1.7	20	508
ALH00018	1/4	6.4	7/16	11.1	3/32	2.4	50	15	3/4	19.0	35	2.4	29.9	760
ALH00019	1/4	6.4	1/2	12.7	1/8	3.2	50	15	1/2	12.7	40	2.8	29.9	760
ALH02019	1/4	6.4	1/2	12.7	1/8	3.2	100	30.5	1/2	12.7	40	2.8	29.9	760
ALH00022	5/16	7.9	7/16	11.1	1/16	1.6	50	15	1-3/8	34.9	20	1.4	13	330
ALH00023	5/16	7.9	1/2	12.7	3/32	2.4	50	15	1	25.4	30	2.0	29.9	760
ALH00024	5/16	7.9	9/16	14.3	1/8	3.2	50	15	7/8	22.2	35	2.4	29.9	760
ALH00025	5/16	7.9	5/8	15.9	5/32	4.0	50	15	3/4	19.0	45	3.1	29.9	760
ALH00027	3/8	9.5	1/2	12.7	1/16	1.6	50	15	1-1/2	38.1	20	1.4	9	229
ALH00028	3/8	9.5	9/16	14.3	3/32	2.4	50	15	1-3/8	34.9	25	1.7	21	533
ALH00029	3/8	9.5	5/8	15.9	1/8	3.2	50	15	1-1/8	28.6	30	2.0	29.9	760
ALH00032	7/16	11.1	9/16	14.3	1/16	1.6	50	15	2-1/4	57.2	15	1.0	7	178
ALH00033	7/16	11.1	5/8	15.9	3/32	2.4	50	15	1-3/4	44.4	20	1.4	15	381
ALH00034	7/16	11.1	11/16	17.5	1/8	3.2	50	15	1-3/8	34.9	25	1.7	28	711
ALH00036	1/2	12.7	5/8	15.9	1/16	1.6	50	15	2-7/8	73.0	10	0.7	5	127
ALH00037	1/2	12.7	11/16	17.5	3/32	2.4	50	15	2-1/4	57.2	20	1.4	12	305
ALH02037	1/2	12.7	11/16	17.5	3/32	2.4	100	30.5	2-1/4	57.2	20	1.4	12	305
ALH00038	1/2	12.7	3/4	19.0	1/8	3.2	50	15	1-1/2	38.1	25	1.7	21	533
ALH00039	1/2	12.7	13/16	20.6	5/32	4.0	50	15	1-1/2	38.1	30	2.0	29.9	760
ALH00041	9/16	14.3	3/4	19.0	3/32	2.4	50	15	2-1/2	63.5	15	1.0	9	229
ALH00042	9/16	14.3	13/16	20.6	1/8	3.2	50	15	2	50.8	20	1.4	17	432
ALH00045	5/8	15.9	13/16	20.6	3/32	2.4	50	15	3	76.2	15	1.0	7	178
ALH00046	5/8	15.9	7/8	22.2	1/8	3.2	50	15	2-3/8	60.3	20	1.4	13	330
ALH00047	5/8	15.9	15/16	23.8	5/32	4.0	50	15	2	50.8	25	1.7	21	533
ALH00050	11/16	17.5	7/8	22.2	3/32	2.4	50	15	3-1/2	88.9	15	1.0	6	152
ALH00053	3/4	19.0	1	25.4	1/8	3.2	50	15	3-1/4	82.6	18	1.2	9	229
ALH00054	3/4	19.0	1-1/16	27.0	5/32	4.0	50	15	2-3/4	69.8	20	1.4	15	381
ALH00055	3/4	19.0	1-1/8	28.6	3/16	4.8	50	15	2-3/8	60.3	25	1.7	21	533
ALH00057	3/4	19.0	1-1/4	31.8	1/4	6.4	50	15	2	50.8	30	2.0	29.9	760
ALH00059	7/8	22.2	1-1/8	28.6	1/8	3.2	50	15	4-1/8	104.8	15	1.0	7	178
ALH00060	7/8	22.2	1-3/16	30.2	5/32	4.0	50	15	3-1/2	88.9	20	1.4	11	279
ALH00062	1	25.4	1-1/4	31.8	1/8	3.2	50	15	4-3/4	120.6	15	1.0	5	127
ALH00064	1	25.4	1-3/8	34.9	3/16	4.8	50	15	4	101.6	20	1.4	12	305
ALH00065	1	25.4	1-1/2	38.1	1/4	6.4	50	15	3	76.2	25	1.7	21	533
ALH00068	1-1/8	28.6	1-1/2	38.1	3/16	4.8	50	15	4-1/2	114.3	18	1.2	9	229
ALH00069	1-1/4	31.8	1-1/2	38.1	1/8	3.2	50	15	7-7/8	200	12	0.8	3	76
ALH00070	1-1/4	31.8	1-5/8	41.3	3/16	4.8	50	15	5-1/2	139.7	15	1.0	7	178
ALH00071	1-1/4	31.8	1-3/4	44.4	1/4	6.4	50	15	4-3/8	111.1	20	1.4	13	330
ALH00073	1-1/2	38.1	1-7/8	47.6	3/16	4.8	50	15	7-1/4	184.2	15	1.0	5	127
ALH00074	1-1/2	38.1	2	50.8	1/4	6.4	50	15	5-7/8	149.2	18	1.2	9	229
ALH00076	1-3/4	44.4	2-1/4	57.2	1/4	6.4	50	15	7-1/2	190.5	16	1.1	7	178
ALH00078	2	50.8	2-1/2	63.5	1/4	6.4	50	15	9-3/8	238.1	15	1.0	5	127
ALH05078	2	50.8	2-1/2	63.5	1/4	6.4	20	6	9-3/8	238.1	15	1.0	5	127

All sizes must meet Minimum Order Requirements (MOQ). Please call Customer Service for MOQ information.

TYGON® LMT-55 Non-DEHP Tubing Available Sizes

Saint-Gobain Part Number	I.D.		O.D.		Wall Thickness		Length		Minimum Bend Radius		Maximum Working Pressure		Vacuum Rating of Mercury at	
	In.	mm	In.	mm	In.	mm	Ft.	m	In.	mm	psi at 73°F*	bars at 23°C*	inches at 73°F	mm at 23°C
Vacuum Sizes														
ALH00015	3/16	4.8	9/16	14.3	3/16	4.8	50	15	1/4	6.4	60	4.1	29.9	760
ALH00020	1/4	6.4	5/8	15.9	3/16	4.8	50	15	1/2	12.7	50	3.5	29.9	760
ALH00030	3/8	9.5	7/8	22.2	1/4	6.4	50	15	5/8	15.9	50	3.5	29.9	760
ALH00040	1/2	12.7	1-1/8	28.6	5/16	7.9	50	15	7/8	22.2	45	3.1	29.9	760
ALH00049	5/8	15.9	1-3/8	34.9	3/8	9.5	50	15	1	25.4	40	2.8	29.9	760
ALH00058	3/4	19.0	1-1/2	38.1	3/8	9.5	50	15	1-1/2	38.1	35	2.4	29.9	760
ALH00066	1	25.4	2	50.8	1/2	12.7	50	15	1-7/8	47.6	35	2.4	29.9	760
ALH05066	1	25.4	2	50.8	1/2	12.7	20	6	1-7/8	47.6	35	2.4	29.9	760
Unipacs (10/10' lengths per carton)														
ALHUN007	1/8	3.2	1/4	6.4	1/16	1.6	10/10'	3/3	3/8	9.5	45	3.1	29.9	760
ALHUN012	3/16	4.8	5/16	7.9	1/16	1.6	10/10'	3/3	5/8	15.9	30	2.0	29.9	760
ALHUN017	1/4	6.4	3/8	9.5	1/16	1.6	10/10'	3/3	1	25.4	25	1.7	20	508
ALHUN019	1/4	6.4	1/2	12.7	1/8	3.2	10/10'	3/3	1/2	12.7	40	2.8	29.9	760
ALHUN027	3/8	9.5	1/2	12.7	1/16	1.6	10/10'	3/3	1-1/2	38.1	20	1.4	9	229
ALHUN036	1/2	12.7	5/8	15.9	1/16	1.6	10/10'	3/3	2-7/8	73.0	10	0.7	5	127
ALHUN053	3/4	19.0	1	25.4	1/8	3.2	10/10'	3/3	3-1/4	82.6	18	1.2	9	229
ALHUN062	1	25.4	1-1/4	31.8	1/8	3.2	10/10'	3/3	4-3/4	120.6	15	1.0	5	127
Vacuum Unipacs (10/10' or 4/10' lengths per carton as shown below)														
ALHUN015	3/16	4.8	9/16	14.3	3/16	4.8	10/10'	3/3	1/4	6.4	60	4.2	29.9	760
ALHUN020	1/4	6.4	5/8	15.9	3/16	4.8	10/10'	3/3	1/2	12.7	50	3.5	29.9	760
ALHUN030	3/8	9.5	7/8	22.2	1/4	6.4	10/10'	3/3	5/8	15.9	50	3.5	29.9	760
ALHUN040	1/2	12.7	1-1/8	28.6	5/16	7.9	10/10'	3/3	7/8	22.2	45	3.1	29.9	760
ALHUN049	5/8	15.9	1-3/8	34.9	3/8	9.5	10/10'	3/3	1	25.4	40	2.8	29.9	760
ALHUN058	3/4	19.0	1-1/2	38.1	3/8	9.5	10/10'	3/3	1-1/2	38.1	35	2.4	29.9	760
ALHUN066	1	25.4	2	50.8	1/2	12.7	4/10'	1.2/3	1-7/8	47.6	35	2.4	29.9	760

Metric Sizes

Saint-Gobain Part Number	I.D. mm	O.D. mm	Wall Thickness mm	Length m	Minimum Bend Radius mm	Maximum Working Pressure Bars at 23°C	Vacuum Rating mm of Mercury at 23°C
ALH1S1502	2	4	1	15	7	2.8	760
ALH1S1517	3	5	1	15	13	2.0	760
ALH1S1518	4	6	1	15	16	1.7	533
ALH1S1503	5	8	1.5	15	19	2.0	760
ALH1S1504	6	9	1.5	15	22	1.7	559
ALH1S1505	7	10	1.5	15	29	1.4	381
ALH1S1506	8	12	2	15	29	1.7	533
ALH1S1507	10	14	2	15	42	1.4	356

Unless otherwise noted, all tests were conducted at room temperature (73°F/23°C). Values shown were determined on 0.075"/1.9 mm thick extruded strip or 0.075"/1.9 mm thick molded ASTM plaques or molded ASTM durometer buttons.

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

Please consult factory for availability

Metric dimensions are nominal

All sizes must meet Minimum Order Requirements (MOQ). Please call Customer Service for MOQ information.

For more than four decades, Saint-Gobain Performance Plastics and its family of companies have supplied the world with innovative, high-performance polymer products for the most demanding applications. Our tradition of excellence goes back more than 300 years through our parent company, Compagnie de Saint-Gobain, one of the world's top 100 industrial corporations, with operations in 64 countries. This successful corporation has been built with the single purpose of serving the customer and a commitment to quality and leadership in each of the industries served.

SAINT-GOBAIN

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Consult a Saint-Gobain Performance Plastics Sales Representative for the product and material formulation that best suits your specific application needs.

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WARNING: The content of Saint-Gobain tubing materials is not certified by the FDA for implant devices and is neither designed nor intended to be used in medical applications involving permanent implantation in the human body or permanent contact with body fluids or tissues. Failure to comply with this warning may lead to serious bodily injury or death.

IMPORTANT: It is the user's responsibility to ensure the suitability and safety of Saint-Gobain Performance Plastics materials for all intended uses. Laboratory, field or clinical tests must be conducted in accordance with applicable requirements in order to determine the safety and effectiveness for use of materials in any particular application. If intended for medical use, it is the user's responsibility to ensure that the materials to be used comply with all applicable medical regulatory requirements.

Limitation of Liability: Except for products for which Saint-Gobain Performance Plastics (SGPPL) has established a specific written warranty, the products described herein are sold by SGPPL without any guarantee and/or warranty, oral or written. User assumes all risk, if any, including the risk of injury, loss or damage, whether direct, consequential or incidental, arising out of the use, misuse or inability to use these products.

SAINT-GOBAIN PERFORMANCE PLASTICS DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

NOTE: Saint-Gobain Performance Plastics Corporation does not assume any responsibility or liability for any advice furnished by it, or for the performance or results of any installation or use of the product or of any final product into which the product may be incorporated by the purchaser and/or user.

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