

## Cole-Parmer® TPV Pharma Grade Tubing

Use the biocompatible thermoplastic vulcanizate (TPV) tubing for peristaltic pumping, filling, and fluid transfer applications. This flexible opaque tubing offers excellent pump performance while providing great chemical resistance, making it a great alternative to silicone tubing.

TPV tubing does not contain BPA, phthalates, PVC, or peroxides that can leach out into the fluid, making it perfect for pharmaceutical, laboratory, and diagnostic applications. Tubing is manufactured, double-bagged, and sealed in an ISO Class 7 cleanroom.



### CERTIFICATION

FDA 21 CFR 177.2600, USP 85, USP 87 and 88, USP 665 and 661.2, USP 788, and USP Class VI

**WARNING:** This product is not approved or intended for, and should not be used for, medical, clinical, surgical, or other patient-oriented applications.

USA	+1.800.323.4340 +1.847.549.7600	UK	+44 (0) 1480.272279 +33 (0) 1.87.170142*
Canada	+1.800.363.5900	Italy	+49 (0) 937.792030*
China	+86.21.5109.9909	All others	+39.02.84349215 +1.847.549.7600
India	+1.800.266.1244		

### APPLICATIONS

- Peristaltic pumps, pinch valves, and bioreactor lines
- Ideal for general-purpose, laboratory, and single-use applications

### FEATURES/BENEFITS

- Biocompatible TPV has excellent chemical and kink resistance for longer pumping life
- Silicone alternative when chemical resistance is a concern
- Manufactured and double-bagged in an ISO Class 7 cleanroom
- Sterilize by autoclave, chemical sterilant, ethylene oxide (EtO), gamma irradiation, and x-ray
- Wide temperature range –59 to 135 °C (–75 to 275 °F)
- Flexible tubing with a 68 Shore A durometer
- Opaque tab tubing—perfect for light sensitive fluids
- PFA and pyrogen-free

## Physical Properties

	ASTM	Units	Typical Value
Durometer Hardness, 10s	D2240	Shore A	68
Specific Gravity	D792	g/cm <sup>3</sup>	0.952
Tensile Strength at 23 °C (73 °F)	D412	psi (MPa)	697 (4.8)
Tensile Stress at 21 °C (70 °F)	D412	psi (MPa)	540 (3.7)
Elongation Break at 23 °C (73 °F)	D412	%	240
Compression Set 22 hours at 100 °C (212 °F)	D395	%	69
Tear Resistance	D624	lb-f/in (kN/m)	208 (36.8)
Embrittlement Temperature	—	°C (°F)	-59 (-75)
Maximum Working Temperature	—	°C (°F)	204 (400)
Gamma Irradiation Recommended Dose	—	KGy	27.5 to 40
Color	—	—	Tan
Shelf Life	—	Years	7

## Specification and Ordering Table

Tubing ID	Dimensions in. (mm)		Working Pressure psi (bar)	Burst Pressure psi (bar)	Max Vacuum (inHg)	Bend Radius in. (mm)	Item Number	Length (ft)
	Tubing OD	Wall						
1/16" (1.6)	3/16" (4.8)	1/16" (1.6)	51.3 (3.5)	153.9 (10.6)	29.5	1/4" (6.4)	<a href="#">50119-82</a>	50
1/8" (3.2)	1/4" (6.4)	1/16" (1.6)	34.5 (2.4)	103.5 (7.1)	29.5	1" (25.4)	<a href="#">50119-83</a>	50
3/16" (4.8)	5/16" (8)	1/16" (1.6)	25.9 (1.8)	77.7 (5.4)	29.5	1-3/4" (44.5)	<a href="#">50119-84</a>	50
3/16" (4.8)	7/16" (11)	3/32" (2.4)	41.4 (2.9)	124.3 (8.6)	29.5	2-3/4" (70)	<a href="#">50119-87</a>	50
1/4" (6.4)	3/8" (9.5)	1/16" (1.6)	20.7 (1.4)	62.1 (4.3)	25	2-1/2" (63.5)	<a href="#">50119-88</a>	50
1/4" (6.4)	7/16" (11)	3/32" (2.4)	28.2 (1.9)	84.5 (5.8)	29.5	—	<a href="#">50119-89</a>	50
1/4" (6.4)	1/2" (12.7)	1/8" (3.2)	34.5 (2.4)	103.5 (7.1)	29.5	3-1/4" (82.6)	<a href="#">50119-85</a>	50
3/8" (9.5)	5/8" (15.9)	1/8" (3.2)	25.9 (1.8)	77.6 (5.4)	29.5	4" (101.6)	<a href="#">50119-86</a>	50
1/2" (12.7)	3/4" (19.1)	1/8" (3.2)	20.7 (1.4)	62.1 (4.3)	15	5-1/2" (140)	<a href="#">50119-90</a>	50