

# TPE TUBING

When a single drop of fluid can make the difference in someone's health, you need smart fluid handling solutions that get the job done safely. Manufacturers worldwide rely on connector products that improve yield, cut costs and reduce time to market.

FlowLinX® TPE tubing is designed for your high-purity drug processing needs. It is perfectly suited for processes requiring high chemical compatibility tubing, and can be welded, heat sealed, or overmolded to ensure fluid line integrity. Manufactured in ISO 8 cleanrooms, this tubing is animal component free and meets USP <85>.

## REGULATORY OVERVIEW:

### Material of Construction

TPE (Thermoplastic elastomer)

### Biocompatibility

USP <85>, Bacterial Endotoxin

USP <88>, Biological Reactivity Tests, Class VI, In Vivo

USP <87>, Biological Reactivity Tests, Class VI, In Vitro

ISO 10993-4, Hemolysis

ISO 10993-10, Irritation and Sensitization

ISO 10993-11, Systemic Toxicity

### Physiochemical

USP <661>, Plastic Packaging Systems

EP 3.2.9, Rubber Closures for Containers

FDA 21CFR 177.2600, Rubber Articles Intended for Repeated Use

### Extractables

Per USP <665>

### Legislation

REACH

RoHS

Conflict Mineral

### Shelf Life

5 Years, Non-Sterile/Non-Irradiated



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## A SUSTAINABLE ALTERNATIVE MATERIAL

The FlowLinX® TPE tubing also represents a sustainable alternative material. Our TPE is created with 40% 1<sup>st</sup> generation biomass. Its carbon footprint is nearly 25% lower compared to its standard counterpart without compromising form, fit, and function requirements.

For a small company purchasing a little over 215,000 feet of TPE per year, switching from industry-standard TPE to F-Flex will save 763 tons of CO<sub>2</sub> annually.

	UNIT	STANDARD TPE	F-FLEX-22520
Durometer Hardness	Shore A, 10 sec	67	70
Specific Gravity	-	0.89	0.88
Tensile Strength (Break, 73° F)	psi	1180	1190
Tensile Elongation (Break, 73° F)	%	600	630
Viscosity (392 °F, 1340s-1)	Pa s	82	54
Compression Set @ 72° F	%	19%	18%
Compression Set @ 212° F	%	69%	58%
Bio-based content weight (Gen 1 biomass)	%	0%	40%
Cradle-to-gate Product Carbon Footprint (PCF)	kg CO2e / kg product	3.10 kg	2.35 kg

## PART NUMBERS

ID (INCH)	ID (MM)	OD (INCH)	OD (MM)	WALL (INCH)	WALL (MM)	TUBING SIZE NUMBER	COIL SIZE	
							25 FT (7.5 M)	50 FT (15 M)
1/8	3.2	1/4	6.4	1/16	1.6	16	F-FLEX-0125-0250-C25	F-FLEX-0125-0250-C50
3/16	4.8	5/16	8	1/16	1.6	25	F-FLEX-0188-0313-C25	F-FLEX-0188-0313-C50
3/16	4.8	3/8	9.6	3/32	2.4	15	F-FLEX-0188-0375-C25	F-FLEX-0188-0375-C50
1/4	6.4	3/8	9.6	1/16	1.6	17	F-FLEX-0250-0375-C25	F-FLEX-0250-0375-C50
1/4	6.4	7/16	11.2	3/32	2.4	24	F-FLEX-0250-0438-C25	F-FLEX-0250-0438-C50
1/4	6.4	1/2	12.8	1/8	3.2	26	F-FLEX-0250-0500-C25	F-FLEX-0250-0500-C50
5/16	8	7/16	11.2	1/16	1.6		F-FLEX-0313-0438-C25	F-FLEX-0313-0438-C50
5/16	8	1/2	12.8	3/32	2.4	35	F-FLEX-0313-0500-C25	F-FLEX-0313-0500-C50
3/8	9.6	1/2	12.8	1/16	1.6		F-FLEX-0375-0500-C25	F-FLEX-0375-0500-C50
3/8	9.6	9/16	14.3	3/32	2.4	36	F-FLEX-0375-0563-C25	F-FLEX-0375-0563-C50
3/8	9.6	5/8	15.9	1/8	3.2	73	F-FLEX-0375-0625-C25	F-FLEX-0375-0625-C50
1/2	12.8	3/4	19	1/8	3.2	82	F-FLEX-0500-0750-C25	F-FLEX-0500-0750-C50
5/8	15.9	7/8	22.3	1/8	3.2		F-FLEX-0625-0875-C25	F-FLEX-0625-0875-C50
3/4	19	1	25.4	1/8	3.2	90	F-FLEX-0750-1000-C25	F-FLEX-0750-1000-C50
3/4	19	1 1/8	34.9	3/16	4.8		F-FLEX-0750-1125-C25	F-FLEX-0750-1125-C50
1	25.4	1 3/8	34.9	3/16	4.8		F-FLEX-1000-1375-C25	F-FLEX-1000-1375-C50