



# PolyFLEX™ 50 / 50B

## Product Features

The PolyFLEX™ 50 / 50B product line is made from a semi-rigid low density polyethylene giving it a natural milky white color. This product line contains no plasticizers and very low levels of extractables. It maintains FDA approval and is the most chemically resistant product offered by Finger Lakes Extrusion. Although PolyFLEX™ 50 is milky white, users are still able to determine if there is flow inside of the tubing. PolyFLEX™ 50B is opaque black and inhibits algae growth and UV degradation making it a good choice for outdoor use.

### PolyFLEX™ 50 Tubing - Natural

- Semi-rigid and translucent
- Low in extractables
- Offers a wide range of working temperatures
- Resistant to a broad range of chemicals

### PolyFLEX™ 50 Tubing - Black

- Same formulation as PolyFLEX™ 50
- More resistant to UV radiation than natural tubing
- Does not promote algae growth

## Typical Applications

### PolyFLEX™ 50 - Natural

- Transfer of foods and beverages
- Instrumentation
- Chemical lines

### PolyFLEX™ 50 - Black

- Outdoor applications
- Light-sensitive media
- Color coding of processing lines

## Specifications

All PolyFLEX™ 50 / 50B tubing products offer the following:

- This product meets the requirements for polyolefin resins intended for food packaging applications as described in the FDA olefin polymer regulation 21 CFR 177.1520(c)2.2. The resin may be used in contact with all types of food as defined in Table 1, 21 CFR 176.170(c) and at use conditions B-H as defined in Table 2, 21 CFR 176.170(c). This product is produced in accordance with good manufacturing practices (GMP) as outlined in 21 CFR 174.5
- Meets RoHS and REACH standards, also does not contain any substances listed on Proposition 65

## Chemical Resistance

Ratings for ideal conditions 73°F / 25°C

Strong Mineral Acids	Excellent
Organic Acids	Good
Weak Acids	Excellent
Bases - Weak	Excellent
Bases - Strong	Good
Solvents	Good

# PolyFLEX™ 50 / 50B Size & Physical Properties

PolyFLEX™ 50 Size Chart

Catalog Number	ID Size In.	OD Size In.	Wall	Operating Pressure PSIG 73 °F	Case Qty. Ft.
8750-4245	1/8	1/4	1/16	200	100
8750-4281	.170	1/4	.040	120	100
8750-8281	.170	1/4	.040	120	500
8750-4335	1/4	3/8	1/16	120	100
8750-8335	1/4	3/8	1/16	120	500
8750-4430	3/8	1/2	1/16	86	100
8750-8430	3/8	1/2	1/16	86	500
8750-4505	1/2	5/8	1/16	66	100
8750-8505	1/2	5/8	1/16	66	500
8750-2605	3/4	1	1/8	80	50

PolyFLEX™ 50B Size Chart

Catalog Number	ID Size In.	OD Size In.	Wall	Operating Pressure PSIG 73 °F	Case Qty. Ft.
8752-4245	1/8	1/4	1/16	200	100
8752-4281	.170	1/4	.040	120	100
8752-4335	1/4	3/8	1/16	120	100
8752-4430	3/8	1/2	1/16	86	100
8752-4505	1/2	5/8	1/16	66	100

## Physical Properties

Model	PolyFLEX™ 50		PolyFLEX™ 50B	
	ASTM Method	Value Rating	ASTM Method	Value Rating
Hardness; Shore D (+/- 5)	D2240	50	D2240	50
Vacuum		Not Recommended		Not Recommended
Operating temperature range		-100 ° - 175 ° F -73 ° - 79 ° C		-100 ° - 175 ° F -73 ° - 79 ° C
Maximum Working Pressure		73 ° F / 120PSI 25 ° F / 60PSI		73 ° F / 120PSI 125 ° F / 60PSI
Testing Size		1/4"ID x 1/16"W		1/4"ID x 1/16"W
Color		Natural Translucent		Black
Odor		Slight		Slight
Taste		None		None
Specific Gravity; g/cm <sup>3</sup>	D792	.92	D792	.92
Tensile Strength; psi	D638	1700	D638	1700
Ultimate Elongation; %	D638	600	D638	600
Flame Resistance	D568	Slow Burn	D568	Slow Burn

\* The above is accurate to the best of the Company's knowledge, however, these are typical values and should not be used as a certification. All materials should be tested for suitability in their intended use.