# **Tubing Specifications**



## **Tubing Specifications LLDPE**

Tubing, 3/8"ID x ½"OD, Natural		Tubing, 1/4"ID x 3/8"OD, Natural	
E00001	20 ' roll	E00002	20' roll
E00001-00	by the foot	E00002-00	by the foot
E00001-50	50' roll	E00002-50	50' roll
E00001-100	100' roll	E00002-100	100' roll
E00001-250	250' roll	E00002-250	250' roll
E00001-500	500' roll	E00002-500	500' roll

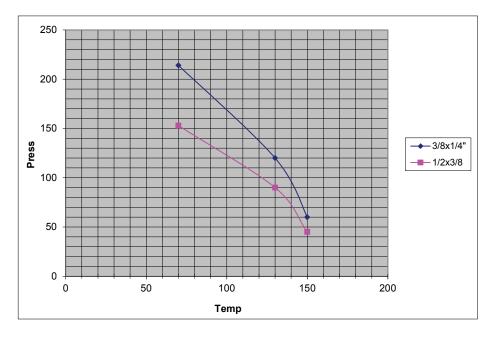
Tubing, 3/8"ID x 1/2"OD, Black, UV Resistant		Tubing, 1/4"ID x 3/8"OD, Black, UV Resistant	
E00074	by the foot	E00075	by the foot
E00074-500	500' roll	E00075-500	500' roll

#### **Linear Low Density Polyethylene Plastic Tubing - LLDPE**

I.D. = Inside Diameter O.D. = Outside Diameter

	Working		
I.D. Sizes	O.D. Sizes	Wall Thickness	PSI @ 73°F
1/4	3/8	1/16	214
3/8	1/2	1/16	153

### Temperature vs. Working Pressure Relationship of LLDPE



Temperature directly affects the strength properties of LLDPE. As the liquid or atmospheric temperatures rise, the pressure capability of tubing decreases rapidly. The chart shows an approximation of this relationship.



## Specifications

#### **LLDPE Polyethylene Tubing (Natural and Black)**

Properties	Units	Typical values (1) (S.I.)	
Melt Index	g/10 min	0.69	
Density	g/cc	0.9216	
Tensile Yield	MPa	9.5	
	PSI	1380	
Tensile Strength	MPa	21.8	
	PSI	3160	
Tensile Elongation	%	780	
Flexural Modules	MPa	333	
	PSI	48.200	
Flexural Strength	MPa	13	
	PSI	1890	
Izod Impact		No Breaks	
ESCR - Condition B	Hours	336 with no failures	
Condition C	Hours	336 with no failures	

<sup>(1)</sup> Typical Values represent average laboratory values and are intended as guides only, not as specific specification limits.

Methods of the American Society for Testing and Materials (ASTM) are used whenever applicable.

LLDPE 1000 complies with the specifications contained in U.S.A. Food and Drug Administration (FDA) Regulation 21 CFR 177.1520 for Olefin Polymers, para. (c) 3.1 and 3.2 and thus may be used in contact with food as described in the Regulations.

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<sup>(2)</sup> Properties designated have been determined in accordance with the current issues of the specified testing methods.