

# FORMflex

## POLYETHYLENE MATERIAL PROPERTIES & TOLERANCES

*Formflex polyethylene is certified to conform to the following properties & tolerances:*

Melt Index (g/10min)	D 1238	.250 - .300
Density	D1505	.950 - .955
Tensile Strength @ (2 in./min)	D 638 (with type IV specimen)	
Yield (lb./sq. in.)		3,700
Elongation (%)		>800
1% Secant Modulus of Elasticity (lb./sq. in.)	D 638	120,000
Flexural Stiffness (lb./sq. in.)	D747	125,000
Torsional Stiffness (lb./sq. in.)	D 1043	45,000
Low Temperature Brittleness (°C)		<-76
Moisture Vapor Transmission Rate (g-mil/100 sq. in./24 hr. @ 37.8C)	E 96	.3
Water Absorption/24 hr.	D 570	nil
Hardness, Shore D	D 2240	65
IZOD Impact Strength @ Room Temp. (Ft. lb./in.)	D 256	6.3
Flexural Modulus @ 1% Secant	D 790	165,000
Heat Deflection Temp. @ 66 P.S.I. (°C)	D 648	73
VICAT Softening Temp. (°C)	D 1525	122
Tensile Impact Strength (Ft. lb./in.)	D 1822	110
UL Rating	UL 94	HB (Horizontal Burn)
Color Variance		+/- 2.0 Delta E
Flatness Tolerance		+/- 1/4" from level
Squareness Tolerance		+/- 1/16" / foot of length
Gauge Tolerance		</.035 +/- 10% >.035 +/- 7½%

We typically blend a small percentage of Anti-stat into each batch of material unless requested not to do so by our customers. Other additives such as Ultra Violet Inhibitors (UVI) are available upon request.

**FORMflex** polyethylene meets the conditions of section 21 CFR, Section 177.1520 of the USA Food and Drug Administration's (FDA) Code of Federal Regulations. The resin may be safely used to produce packaging material, containers, and equipment intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food.

This data is presented only as typical properties, which to the best knowledge is true and accurate. However, since conditions of use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part. We disclaim all liability in connection with the use of information contained herein or otherwise. All risks of such use are assumed by the user. Furthermore, nothing contained herein shall be construed as an inducement or recommendation to use any process, or to manufacture or use any product in conflict with existing or future patents.