

## Overview of materials for Low Density Polyethylene (LDPE), Blow Molding Grade

Category : Polymer , Thermoplastic , Polyethylene (PE) , LDPE , Low Density Polyethylene (LDPE), Blow Molding Grade

### Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Low Density Polyethylene (LDPE), Blow Molding Grade". Each property range of values reported is minimum and maximum values of appropriate MatWeb entries. The comments report the average value, and number of data points used to calculate the average. The values are not necessarily typical of any specific grade, especially less common values and those that can be most affected by additives or processing methods.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Overview-of-materials-for-Low-Density-Polyethylene-LDPE-Blow-Molding-Grade.php](http://www.lookpolymers.com/polymer_Overview-of-materials-for-Low-Density-Polyethylene-LDPE-Blow-Molding-Grade.php)

Physical Properties	Metric	English	Comments
Density	0.918 - 0.955 g/cc	0.0332 - 0.0345 lb/in <sup>3</sup>	Average value: 0.923 g/cc Grade Count:39
Apparent Bulk Density	0.526 g/cc	0.0190 lb/in <sup>3</sup>	Average value: 0.526 g/cc Grade Count:3
Environmental Stress Crack Resistance	16.0 - 100 hour	16.0 - 100 hour	Average value: 72.0 hour Grade Count:3
Thickness	31.8 - 50.8 microns	1.25 - 2.00 mil	Average value: 34.9 microns Grade Count:4
Melt Flow	0.250 - 22.0 g/10 min	0.250 - 22.0 g/10 min	Average value: 2.50 g/10 min Grade Count:40

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	45.0 - 59.0	45.0 - 59.0	Average value: 51.3 Grade Count:20
Tensile Strength, Ultimate	10.3 - 18.0 MPa	1500 - 2610 psi	Average value: 14.1 MPa Grade Count:23
Film Tensile Strength at Yield, MD	9.38 - 11.0 MPa	1360 - 1600 psi	Average value: 10.3 MPa Grade Count:3
Film Tensile Strength at Yield, TD	9.31 - 11.0 MPa	1350 - 1600 psi	Average value: 10.2 MPa Grade Count:3
Tensile Strength, Yield	8.48 - 26.2 MPa	1230 - 3800 psi	Average value: 13.0 MPa Grade Count:22
Film Elongation at Break, MD	200 - 230 %	200 - 230 %	Average value: 216 % Grade Count:3
Film Elongation at Break, TD	500 - 610 %	500 - 610 %	Average value: 548 % Grade Count:3
Elongation at Break	100 - 850 %	100 - 850 %	Average value: 536 % Grade Count:28
Modulus of Elasticity	0.180 - 0.483 GPa	26.1 - 70.1 ksi	Average value: 0.318 GPa Grade Count:10
Flexural Modulus	0.152 - 2.21 GPa	22.0 - 320 ksi	Average value: 0.366 GPa Grade

Mechanical Properties	Metric	English	Count:18 Comments
Secant Modulus, MD	0.152 - 0.208 GPa	22.0 - 30.2 ksi	Average value: 0.177 GPa Grade Count:4
Secant Modulus, TD	0.172 - 0.228 GPa	25.0 - 33.0 ksi	Average value: 0.193 GPa Grade Count:3
Elmendorf Tear Strength MD	270 - 390 g	270 - 390 g	Average value: 306 g Grade Count:3
Elmendorf Tear Strength TD	100 - 170 g	100 - 170 g	Average value: 152 g Grade Count:3
Dart Drop Test	65.0 - 120 g	0.143 - 0.265 lb	Average value: 95.0 g Grade Count:4
Film Tensile Strength at Break, MD	18.6 - 29.1 MPa	2700 - 4220 psi	Average value: 24.0 MPa Grade Count:3
Film Tensile Strength at Break, TD	17.0 - 17.9 MPa	2470 - 2600 psi	Average value: 17.3 MPa Grade Count:3

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	40.0 - 54.0 °C	104 - 129 °F	Average value: 47.0 °C Grade Count:7
Vicat Softening Point	85.0 - 107 °C	185 - 225 °F	Average value: 94.6 °C Grade Count:28
Brittleness Temperature	-76.0 - 0.500 °C	-105 - 32.9 °F	Average value: -67.5 °C Grade Count:10

Optical Properties	Metric	English	Comments
Haze	3.40 - 15.0 %	3.40 - 15.0 %	Average value: 8.45 % Grade Count:6
Gloss	20.0 - 77.0 %	20.0 - 77.0 %	Average value: 60.2 % Grade Count:6

Processing Properties	Metric	English	Comments
Melt Temperature	160 - 260 °C	320 - 500 °F	Average value: 196 °C Grade Count:11

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China