

Overview of materials for Low Density Polyethylene (LDPE), Masterbatch Grade

Categories: [Polymer](#); [Thermoplastic](#); [Polyethylene \(PE\)](#); [Low Density \(LDPE\)](#); [Low Density Polyethylene \(LDPE\)](#), [Masterbatch Grade](#)

Material Notes: This property data is a summary of similar materials in the MatWeb database for the category "Low Density Polyethylene (LDPE), Masterbatch 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.

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	0.913 - 1.19 g/cc	0.0330 - 0.0430 lb/in ³	Average value: 0.938 g/cc Grade Count:32
Particle Size	150 - 1200 µm	150 - 1200 µm	Average value: 404 µm Grade Count:26
Melt Flow	0.200 - 155 g/10 min	0.200 - 155 g/10 min	Average value: 43.1 g/10 min Grade Count:31

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	40.0 - 50.0	40.0 - 50.0	Average value: 44.0 Grade Count:17
Tensile Strength, Ultimate	8.00 - 10.0 MPa	1160 - 1450 psi	Average value: 8.80 MPa Grade Count:5
Tensile Strength, Yield	8.00 - 9.00 MPa	1160 - 1310 psi	Average value: 8.50 MPa Grade Count:4
Elongation at Break	90.0 - 120 %	90.0 - 120 %	Average value: 98.2 % Grade Count:22
Modulus of Elasticity	0.0900 - 0.220 GPa	13.1 - 31.9 ksi	Average value: 0.134 GPa Grade Count:13

Thermal Properties	Metric	English	Comments
Melting Point	100 - 140 °C	212 - 284 °F	Average value: 107 °C Grade Count:27
Vicat Softening Point	68.0 - 92.8 °C	154 - 199 °F	Average value: 78.1 °C Grade Count:27
Brittleness Temperature	-45.0 - -25.0 °C	-49.0 - -13.0 °F	Average value: -35.0 °C Grade Count:4

Processing Properties	Metric	English	Comments
Processing Temperature	200 °C	392 °F	Average value: 200 °C Grade Count:8

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.