

Overview of materials for Medium Density Polyethylene (MDPE), Extruded

Category : Polymer , Thermoplastic , Polyethylene (PE) , MDPE , Medium Density Polyethylene (MDPE), Extruded

Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Medium Density Polyethylene (MDPE), Extruded". 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-Medium-Density-Polyethylene-MDPE-Extruded.php

Physical Properties	Metric	English	Comments
Density	0.930 - 1.05 g/cc	0.0336 - 0.0379 lb/in ³	Average value: 0.945 g/cc Grade Count:22
Environmental Stress Crack Resistance	1000 - 5000 hour	1000 - 5000 hour	Average value: 2290 hour Grade Count:10
	>= 2000 hour @Temperature 80.0 - 80.0 °C	>= 2000 hour @Temperature 176 - 176 °F	Average value: 2000 hour Grade Count:2
Melt Flow	0.200 - 21.0 g/10 min	0.200 - 21.0 g/10 min	Average value: 3.84 g/10 min Grade Count:22

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	48.0 - 69.0	48.0 - 69.0	Average value: 57.2 Grade Count:11
Tensile Strength, Ultimate	12.5 - 33.1 MPa	1810 - 4800 psi	Average value: 22.8 MPa Grade Count:5
Tensile Strength, Yield	13.8 - 31.0 MPa	2000 - 4500 psi	Average value: 19.7 MPa Grade Count:16
Elongation at Break	50.0 - 1000 %	50.0 - 1000 %	Average value: 510 % Grade Count:17
Modulus of Elasticity	0.800 GPa	116 ksi	Average value: 0.800 GPa Grade Count:3
Flexural Modulus	0.590 - 0.840 GPa	85.6 - 122 ksi	Average value: 0.694 GPa Grade Count:9

Thermal Properties	Metric	English	Comments
Melting Point	126 - 128 °C	259 - 262 °F	Average value: 126 °C Grade Count:5
Vicat Softening Point	114 - 127 °C	237 - 261 °F	Average value: 119 °C Grade Count:4
Brittleness Temperature	-100 - -70.0 °C	-148 - -94.0 °F	Average value: -79.3 °C Grade Count:8

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+15 - 3.00e+16 ohm-cm	1.00e+15 - 3.00e+16 ohm-cm	Average value: 1.16e+16 ohm-cm Grade Count:7
Dielectric Constant	2.30 - 2.55	2.30 - 2.55	Average value: 2.38 Grade Count:3
Dielectric Strength	21.7 - 39.4 kV/mm	550 - 1000 kV/in	Average value: 29.2 kV/mm Grade Count:6
Dissipation Factor	0.000500	0.000500	Average value: 0.000500 Grade Count:3

Processing Properties	Metric	English	Comments
Processing Temperature	180 - 240 °C	356 - 464 °F	Average value: 210 °C Grade Count:6
Die Temperature	185 - 218 °C	365 - 425 °F	Average value: 198 °C Grade Count:7
Melt Temperature	160 - 230 °C	320 - 446 °F	Average value: 190 °C Grade Count:8
Head Temperature	185 - 210 °C	365 - 410 °F	Average value: 196 °C Grade Count:6

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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