

Overview of materials for Anhydride-Modified Polyethylene

Category : Polymer , Thermoplastic , Polyethylene (PE) , Anhydride-Modified Polyethylene

Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Anhydride-Modified Polyethylene". 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-Anhydride-Modified-Polyethylene.php

Physical Properties	Metric	English	Comments
Density	0.880 - 0.960 g/cc	0.0318 - 0.0347 lb/in ³	Average value: 0.924 g/cc Grade Count:71
Particle Size	125 - 500 µm	125 - 500 µm	Average value: 283 µm Grade Count:3
Water Vapor Transmission	4.30 - 7.50 g/m ² /day	0.277 - 0.483 g/100 in ² /day	Average value: 5.78 g/m ² /day Grade Count:6
Viscosity	600 - 4200 cP	600 - 4200 cP	Average value: 1.60e+6 cP Grade Count:6
	@Temperature 140 - 140 °C	@Temperature 284 - 284 °F	
	900000 - 3.00e+6 cP	900000 - 3.00e+6 cP	Average value: 1.60e+6 cP Grade Count:15
	@Temperature 190 - 190 °C	@Temperature 374 - 374 °F	
	900000 - 3.00e+6 cP	900000 - 3.00e+6 cP	Average value: 1.60e+6 cP Grade Count:15
	@Shear Rate 50.0 - 50.0 1/s	@Shear Rate 50.0 - 50.0 1/s	
Oxidative Induction Time (OIT)	10.0 - 118 min	10.0 - 118 min	Average value: 70.8 min Grade Count:4
	20.0 - 20.0 min	20.0 - 20.0 min	Average value: 20.0 min Grade Count:2
	@Temperature 210 - 210 °C	@Temperature 410 - 410 °F	
Methyl Acrylate Content	20.0 - 24.0 %	20.0 - 24.0 %	Average value: 21.3 % Grade Count:3
Thickness	50.8 microns	2.00 mil	Average value: 50.8 microns Grade Count:6
Melt Flow	0.400 - 31.0 g/10 min	0.400 - 31.0 g/10 min	Average value: 3.61 g/10 min Grade Count:71

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	37.0 - 65.0	37.0 - 65.0	Average value: 49.1 Grade Count:10

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	13.0 - 30.0 MPa	1880 - 4350 psi	Average value: 20.4 MPa Grade Count:7
Film Tensile Strength at Yield, MD	8.80 - 21.7 MPa	1280 - 3150 psi	Average value: 12.8 MPa Grade Count:6
Film Tensile Strength at Yield, TD	9.70 - 23.2 MPa	1410 - 3360 psi	Average value: 14.0 MPa Grade Count:6
Tensile Strength, Yield	4.50 - 25.0 MPa	653 - 3630 psi	Average value: 15.5 MPa Grade Count:12
Film Elongation at Break, MD	610 - 840 %	610 - 840 %	Average value: 718 % Grade Count:6
Film Elongation at Break, TD	710 - 840 %	710 - 840 %	Average value: 768 % Grade Count:6
Film Elongation at Yield, MD	4.00 - 30.0 %	4.00 - 30.0 %	Average value: 15.7 % Grade Count:6
Film Elongation at Yield, TD	2.00 - 12.0 %	2.00 - 12.0 %	Average value: 7.67 % Grade Count:6
Elongation at Break	90.0 - 930 %	90.0 - 930 %	Average value: 535 % Grade Count:15
Modulus of Elasticity	1.01 - 1.07 GPa	147 - 155 ksi	Average value: 1.05 GPa Grade Count:3
Elmendorf Tear Strength MD	60.0 - 320 g	60.0 - 320 g	Average value: 173 g Grade Count:6
Elmendorf Tear Strength TD	110 - 690 g	110 - 690 g	Average value: 444 g Grade Count:6
Film Tensile Strength at Break, MD	22.9 - 30.1 MPa	3320 - 4370 psi	Average value: 26.5 MPa Grade Count:6
Film Tensile Strength at Break, TD	2.10 - 28.8 MPa	305 - 4180 psi	Average value: 20.3 MPa Grade Count:6

Thermal Properties	Metric	English	Comments
Melting Point	65.0 - 160 °C	149 - 320 °F	Average value: 116 °C Grade Count:52
Crystallization Temperature	43.0 - 144 °C	109 - 291 °F	Average value: 96.6 °C Grade Count:7
Deflection Temperature at 0.46 MPa (66 psi)	58.0 - 73.0 °C	136 - 163 °F	Average value: 68.0 °C Grade Count:3
Vicat Softening Point	43.0 - 129 °C	109 - 264 °F	Average value: 95.8 °C Grade Count:47
Dropping Point	106 - 116 °C	223 - 241 °F	Average value: 109 °C Grade Count:6

Processing Properties	Metric	English	Comments
Processing Temperature	160 - 270 °C	320 - 518 °F	Average value: 234 °C Grade Count:21
Nozzle Temperature	235 °C	455 °F	Average value: 235 °C Grade Count:16
Adapter Temperature	230 °C	446 °F	Average value: 230 °C Grade Count:4

Die Temperature Processing Properties	220 - 250 °C Metric	428 - 482 °F English	Average value: 238 °C Grade Count:6 Comments
Melt Temperature	160 - 240 °C	320 - 464 °F	Average value: 205 °C Grade Count:8

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