

Overview of materials for Acetal Copolymer + Glass/PTFE

Category : Polymer , Thermoplastic , Acetal (POM) , Acetal Copolymer + Glass/PTFE

Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Acetal Copolymer + Glass/PTFE". 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-Acetal-Copolymer-GlassPTFE.php

Physical Properties	Metric	English	Comments
Density	1.49 - 1.82 g/cc	0.0538 - 0.0658 lb/in ³	Average value: 1.63 g/cc Grade Count:38
Filler Content	5.00 - 40.0 %	5.00 - 40.0 %	Average value: 19.6 % Grade Count:26
Water Absorption	0.100 - 0.400 %	0.100 - 0.400 %	Average value: 0.237 % Grade Count:8
Additive Loading	10.0 - 30.0 %	10.0 - 30.0 %	Average value: 21.0 % Grade Count:5
Linear Mold Shrinkage	0.00100 - 0.0200 cm/cm	0.00100 - 0.0200 in/in	Average value: 0.00662 cm/cm Grade Count:38
Linear Mold Shrinkage, Transverse	0.0100 - 0.0300 cm/cm	0.0100 - 0.0300 in/in	Average value: 0.0141 cm/cm Grade Count:3

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	107 - 113	107 - 113	Average value: 109 Grade Count:5
Tensile Strength, Ultimate	40.0 - 110 MPa	5800 - 16000 psi	Average value: 84.1 MPa Grade Count:38
Elongation at Break	1.00 - 10.0 %	1.00 - 10.0 %	Average value: 3.09 % Grade Count:36
Elongation at Yield	1.30 - 8.00 %	1.30 - 8.00 %	Average value: 3.52 % Grade Count:3
Modulus of Elasticity	3.00 - 11.7 GPa	435 - 1700 ksi	Average value: 6.79 GPa Grade Count:38
Flexural Yield Strength	55.0 - 179 MPa	7980 - 26000 psi	Average value: 128 MPa Grade Count:37
Flexural Modulus	2.40 - 9.93 GPa	348 - 1440 ksi	Average value: 6.19 GPa Grade Count:37
Izod Impact, Notched	0.420 - 0.881 J/cm	0.787 - 1.65 ft-lb/in	Average value: 0.638 J/cm Grade Count:34
Izod Impact, Unnotched	2.67 - 7.47 J/cm	5.00 - 14.0 ft-lb/in	Average value: 4.98 J/cm Grade Count:34

Charpy Impact Unnotched Mechanical Properties	Metric	English	Comments
	2.00 - 3.00 J/cm ²	9.52 - 14.3 ft-lb/in ²	Average value: 2.50 J/cm ² Grade Count:4
Coefficient of Friction	0.150 - 0.460	0.150 - 0.460	Average value: 0.300 Grade Count:4
Coefficient of Friction, Static	0.130 - 0.500	0.130 - 0.500	Average value: 0.335 Grade Count:4
K (wear) Factor	45.0 - 473 x 10 ⁻⁸ mm ³ /N-M	22.3 - 235 x 10 ⁻¹⁰ in ³ -min/ft-lb-hr	Average value: 306 x 10 ⁻⁸ mm ³ /N-M Grade Count:3

Thermal Properties	Metric	English	Comments
CTE, linear	43.2 - 95.0 μm/m-°C	24.0 - 52.8 μin/in-°F	Average value: 58.8 μm/m-°C Grade Count:4
Deflection Temperature at 0.46 MPa (66 psi)	160 - 183 °C	320 - 361 °F	Average value: 164 °C Grade Count:9
Deflection Temperature at 1.8 MPa (264 psi)	121 - 163 °C	250 - 325 °F	Average value: 153 °C Grade Count:34
Flammability, UL94	HB	HB	Grade Count:31

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+14 - 1.00e+16 ohm-cm	1.00e+14 - 1.00e+16 ohm-cm	Average value: 1.09e+15 ohm-cm Grade Count:10
Surface Resistance	1.00e+12 - 1.00e+14 ohm	1.00e+12 - 1.00e+14 ohm	Average value: 3.40e+13 ohm Grade Count:3

Processing Properties	Metric	English	Comments
Processing Temperature	177 - 210 °C	350 - 410 °F	Average value: 195 °C Grade Count:9
Melt Temperature	175 - 218 °C	347 - 425 °F	Average value: 198 °C Grade Count:27
Mold Temperature	70.0 - 120 °C	158 - 248 °F	Average value: 93.3 °C Grade Count:34
Drying Temperature	75.0 - 121 °C	167 - 250 °F	Average value: 117 °C Grade Count:27
Moisture Content	0.150 %	0.150 %	Average value: 0.150 % Grade Count:24
Dew Point	-31.7 °C	-25.0 °F	Average value: -31.7 °C Grade Count:24
Injection Pressure	68.9 - 103 MPa	10000 - 15000 psi	Average value: 86.2 MPa Grade Count:31

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