

Overview of materials for Acrylic, High Flow, Molded

Category : Polymer , Thermoplastic , Acrylic (PMMA) , Acrylic, High Flow, Molded

Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Acrylic, High Flow, Molded". 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-Acrylic-High-Flow-Molded.php

Physical Properties	Metric	English	Comments
Density	1.15 - 1.19 g/cc	0.0415 - 0.0430 lb/in ³	Average value: 1.18 g/cc Grade Count:11
Water Absorption	0.290 - 0.400 %	0.290 - 0.400 %	Average value: 0.311 % Grade Count:8
Linear Mold Shrinkage	0.00200 - 0.00800 cm/cm	0.00200 - 0.00800 in/in	Average value: 0.00420 cm/cm Grade Count:10
Melt Flow	3.30 - 35.0 g/10 min	3.30 - 35.0 g/10 min	Average value: 17.6 g/10 min Grade Count:10

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	38.0 - 94.0	38.0 - 94.0	Average value: 77.3 Grade Count:8
Tensile Strength, Ultimate	37.9 - 67.0 MPa	5500 - 9720 psi	Average value: 59.1 MPa Grade Count:7
Tensile Strength, Yield	60.7 - 68.0 MPa	8800 - 9860 psi	Average value: 64.6 MPa Grade Count:4
Elongation at Break	3.00 - 50.0 %	3.00 - 50.0 %	Average value: 16.3 % Grade Count:6
Elongation at Yield	5.00 - 10.0 %	5.00 - 10.0 %	Average value: 7.00 % Grade Count:4
Modulus of Elasticity	1.86 - 3.10 GPa	270 - 450 ksi	Average value: 2.80 GPa Grade Count:8
Flexural Yield Strength	71.0 - 115 MPa	10300 - 16700 psi	Average value: 97.9 MPa Grade Count:10
Flexural Modulus	1.86 - 3.24 GPa	270 - 469 ksi	Average value: 2.80 GPa Grade Count:8
Izod Impact, Notched	0.147 - 0.481 J/cm	0.276 - 0.900 ft-lb/in	Average value: 0.259 J/cm Grade Count:10

Thermal Properties	Metric	English	Comments
Thermal Conductivity	0.187 - 0.216 W/m-K	1.30 - 1.50 BTU-in/hr-ft ² -°F	Average value: 0.195 W/m-K Grade Count:6

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	80.0 - 89.0 °C	176 - 192 °F	Average value: 84.3 °C Grade Count:7
Deflection Temperature at 1.8 MPa (264 psi)	76.1 - 93.9 °C	169 - 201 °F	Average value: 82.0 °C Grade Count:9
Vicat Softening Point	81.1 - 102 °C	178 - 216 °F	Average value: 89.5 °C Grade Count:10
Flammability, UL94	HB	HB	Grade Count:6

Optical Properties	Metric	English	Comments
Refractive Index	1.49 - 1.49	1.49 - 1.49	Average value: 1.49 Grade Count:11
Haze	0.300 - 2.00 %	0.300 - 2.00 %	Average value: 0.980 % Grade Count:10
Transmission, Visible	90.0 - 93.0 %	90.0 - 93.0 %	Average value: 92.1 % Grade Count:11

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