

Overview of materials for Acrylonitrile Butadiene Styrene (ABS), 30% Carbon Fiber Filled

Category : Polymer , Thermoplastic , ABS Polymer , Acrylonitrile Butadiene Styrene (ABS), 30% Carbon Fiber Filled

Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Acrylonitrile Butadiene Styrene (ABS), 30% Carbon Fiber Filled". Specific grades with carbon fiber content between 25% and 34% are included. 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-Acrylonitrile-Butadiene-Styrene-ABS-30-Carbon-Fiber-Filled.php

Physical Properties	Metric	English	Comments
Density	1.15 - 1.38 g/cc	0.0415 - 0.0499 lb/in ³	Average value: 1.20 g/cc Grade Count:8
Filler Content	25.0 - 30.0 %	25.0 - 30.0 %	Average value: 28.8 % Grade Count:4
Water Absorption	0.140 - 0.200 %	0.140 - 0.200 %	Average value: 0.157 % Grade Count:7
Linear Mold Shrinkage	0.000500 - 0.00200 cm/cm	0.000500 - 0.00200 in/in	Average value: 0.00119 cm/cm Grade Count:8

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	108 - 110	108 - 110	Average value: 109 Grade Count:4
Tensile Strength, Ultimate	103 - 124 MPa	15000 - 18000 psi	Average value: 115 MPa Grade Count:5
Tensile Strength, Yield	110 - 131 MPa	16000 - 19000 psi	Average value: 122 MPa Grade Count:3
Elongation at Break	1.00 - 2.00 %	1.00 - 2.00 %	Average value: 1.38 % Grade Count:6
Modulus of Elasticity	17.2 - 19.3 GPa	2500 - 2800 ksi	Average value: 18.4 GPa Grade Count:4
Flexural Yield Strength	138 - 186 MPa	20000 - 27000 psi	Average value: 165 MPa Grade Count:8
Flexural Modulus	12.4 - 17.2 GPa	1800 - 2500 ksi	Average value: 14.6 GPa Grade Count:8
Izod Impact, Notched	0.427 - 0.641 J/cm	0.800 - 1.20 ft-lb/in	Average value: 0.547 J/cm Grade Count:8
Izod Impact, Unnotched	2.14 - 3.20 J/cm	4.00 - 6.00 ft-lb/in	Average value: 2.71 J/cm Grade Count:7

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	104 - 113 °C	220 - 235 °F	Average value: 111 °C Grade Count:6
Deflection Temperature at 1.8 MPa (264 psi)	102 - 110 °C	215 - 230 °F	Average value: 106 °C Grade Count:7
Flammability, UL94	HB - V-0	HB - V-0	Grade Count:7

Electrical Properties	Metric	English	Comments
Electrical Resistivity	10.0 ohm-cm - 1e+05	10.0 ohm-cm - 1e+05	Average value: 179 ohm-cm Grade Count:6
Surface Resistance	10.0 - 10000 ohm	10.0 - 10000 ohm	Average value: 3190 ohm Grade Count:3

Processing Properties	Metric	English	Comments
Melt Temperature	204 - 238 °C	400 - 460 °F	Average value: 221 °C Grade Count:3
Mold Temperature	62.8 - 85.0 °C	145 - 185 °F	Average value: 73.9 °C Grade Count:4
Drying Temperature	82.2 °C	180 °F	Average value: 82.2 °C Grade Count:3
Moisture Content	0.100 %	0.100 %	Average value: 0.100 % Grade Count:3
Dew Point	-17.8 °C	0.000 °F	Average value: -17.8 °C Grade Count:3
Injection Pressure	68.9 - 103 MPa	10000 - 15000 psi	Average value: 86.2 MPa Grade Count:4

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