

## Overview of materials for Polyarylamide, Glass Fiber Filled

Category : Polymer , Thermoplastic , Polyarylamide (PAA) , Polyarylamide, Glass Fiber Filled

### Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Polyarylamide, Glass Fiber Filled". 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-Polyarylamide-Glass-Fiber-Filled.php](http://www.lookpolymers.com/polymer_Overview-of-materials-for-Polyarylamide-Glass-Fiber-Filled.php)

Physical Properties	Metric	English	Comments
Density	1.34 - 1.85 g/cc	0.0484 - 0.0668 lb/in <sup>3</sup>	Average value: 1.58 g/cc Grade Count:24
Filler Content	20.0 - 60.0 %	20.0 - 60.0 %	Average value: 42.2 % Grade Count:16
Water Absorption	0.100 - 0.220 %	0.100 - 0.220 %	Average value: 0.180 % Grade Count:11
Moisture Absorption at Equilibrium	1.11 - 2.00 %	1.11 - 2.00 %	Average value: 1.60 % Grade Count:10
Linear Mold Shrinkage	0.000500 - 0.00550 cm/cm	0.000500 - 0.00550 in/in	Average value: 0.00210 cm/cm Grade Count:21

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	70.0 - 269 MPa	10200 - 39000 psi	Average value: 189 MPa Grade Count:23
Elongation at Break	1.00 - 3.50 %	1.00 - 3.50 %	Average value: 2.06 % Grade Count:24
Modulus of Elasticity	6.50 - 26.0 GPa	943 - 3770 ksi	Average value: 15.6 GPa Grade Count:24
Flexural Yield Strength	120 - 390 MPa	17400 - 56500 psi	Average value: 278 MPa Grade Count:24
Flexural Modulus	5.50 - 24.0 GPa	798 - 3480 ksi	Average value: 14.9 GPa Grade Count:24
Izod Impact, Notched	0.350 - 1.30 J/cm	0.656 - 2.44 ft-lb/in	Average value: 0.771 J/cm Grade Count:23
Izod Impact, Unnotched	2.50 - 9.61 J/cm	4.68 - 18.0 ft-lb/in	Average value: 5.96 J/cm Grade Count:23

Thermal Properties	Metric	English	Comments
CTE, linear	15.0 - 32.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	8.33 - 17.8 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	Average value: 21.4 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ Grade Count:7
		2.08 - 5.20 BTU-in/hr-	Average value: 0.430 W/m-K Grade

Thermal Properties	Metric	English	Comments
Melting Point	240 °C	464 °F	Average value: 240 °C Grade Count:10
Deflection Temperature at 1.8 MPa (264 psi)	135 - 241 °C	275 - 465 °F	Average value: 216 °C Grade Count:10
Flammability, UL94	HB - V-0	HB - V-0	Grade Count:15
Oxygen Index	23.0 - 38.5 %	23.0 - 38.5 %	Average value: 27.1 % Grade Count:7

Electrical Properties	Metric	English	Comments
Electrical Resistivity	3000 - 4.00e+15 ohm-cm	3000 - 4.00e+15 ohm-cm	Average value: 1.64e+15 ohm-cm Grade Count:7
Dielectric Constant	3.70 - 5.30	3.70 - 5.30	Average value: 4.28 Grade Count:6
Dielectric Strength	22.7 - 31.0 kV/mm	577 - 787 kV/in	Average value: 27.3 kV/mm Grade Count:6
Dissipation Factor	0.00700 - 0.0230	0.00700 - 0.0230	Average value: 0.0148 Grade Count:6
Arc Resistance	60.0 sec	60.0 sec	Average value: 60.0 sec Grade Count:3
Comparative Tracking Index	250 - 600 V	250 - 600 V	Average value: 474 V Grade Count:6

Processing Properties	Metric	English	Comments
Melt Temperature	247 - 290 °C	477 - 554 °F	Average value: 269 °C Grade Count:24
Mold Temperature	120 - 141 °C	248 - 285 °F	Average value: 130 °C Grade Count:24
Drying Temperature	100 - 121 °C	212 - 250 °F	Average value: 119 °C Grade Count:14
Injection Pressure	50.0 - 250 MPa	7250 - 36300 psi	Average value: 127 MPa Grade Count:20

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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