

Solvay Specialty Polymers Amodel® A-4160 HSL Polyphthalamide (PPA) (Unverified Data**)

Category : Polymer , Thermoplastic , Polyphthalamide (PPA)

Material Notes:

Amodel A-4160 HSL resin is a 60% glass reinforced, heat stabilized polyphthalamide (PPA) which exhibits high modulus at elevated temperatures, a high heat deflection temperature and exceptional creep resistance. This material was designed for metal replacement applications. Its rapid crystallization and good flow characteristics allow shorter cycles for enhanced molding productivity. - Black: A-4160 HSL BK324
Injection Notes: Injection Pressure: 3 to 4 in/sec
Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Amodel-A-4160-HSL-Polyphthalamide-PPA-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.75 g/cc	0.0632 lb/in³	ISO 1183/A
Filler Content	60 %	60 %	Glass Fiber Reinforcement
Water Absorption	0.19 % @Temperature 23.0 °C, Time 86400 sec	0.19 % @Temperature 73.4 °F, Time 24.0 hour	ISO 62
Linear Mold Shrinkage, Flow	0.0050 cm/cm	0.0050 in/in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.0080 cm/cm	0.0080 in/in	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	79.6 MPa @Temperature 200 °C	11500 psi @Temperature 392 °F	ISO 527-2
	244 MPa @Temperature 23.0 °C	35400 psi @Temperature 73.4 °F	ISO 527-2
Elongation at Break	1.4 % @Temperature 23.0 °C	1.4 % @Temperature 73.4 °F	ISO 527-2
	3.3 % @Temperature 200 °C	3.3 % @Temperature 392 °F	ISO 527-2
Tensile Modulus	8.77 GPa @Temperature 200 °C	1270 ksi @Temperature 392 °F	ISO 527-2
	23.3 GPa @Temperature 23.0 °C	3380 ksi @Temperature 73.4 °F	ISO 527-2

Mechanical Properties	137 MPa Metric	19900 psi English	Comments
	@Temperature 200 °C	@Temperature 392 °F	
	385 MPa	55800 psi	ISO 178
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Flexural Modulus	8.50 GPa	1230 ksi	ISO 178
	@Temperature 200 °C	@Temperature 392 °F	
	19.3 GPa	2800 ksi	ISO 178
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Charpy Impact Unnotched	13.0 J/cm²	61.9 ft-lb/in²	ISO 179/1eU
Charpy Impact, Notched	1.30 J/cm²	6.19 ft-lb/in²	ISO 179/1eA

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	304 °C	579 °F	Unannealed; ISO 75-2/A

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	318 - 324 °C	604 - 615 °F	
Front Barrel Temperature	327 - 332 °C	621 - 630 °F	
Melt Temperature	329 - 343 °C	624 - 649 °F	
Mold Temperature	65.6 - 93.3 °C	150 - 200 °F	
Drying Temperature	120 °C	248 °F	
Dry Time	4.00 hour	4.00 hour	

Descriptive Properties	Value	Comments
Additive	Heat Stabilizer	
	Lubricant	
	Mold Release	
Appearance	Black	
Automotive Specifications	ASTM D6779 PA102G60	
Availability	Africa & Middle East	
	Asia Pacific	

Descriptive Properties	Europe Value	Comments
	North America	
	South America	
Features	Fast Molding Cycle	
	Good Chemical Resistance	
	Good Creep Resistance	
	Good Dimensional Stability	
	Good Toughness	
	Heat Stabilized	
	High Heat Resistance	
	High Strength	
	Hot Water Moldability	
	Low CLTE	
	Lubricated	
	Ultra High Stiffness	
Forms	Pellets	
Generic	PPA	
Processing Method	Water-Heated Mold Injection Molding	
RoHS Compliance	RoHS Compliant	
Uses	Automotive Applications	
	Automotive Electronics	
	Automotive Under the Hood	
	Camera Applications	
	Cell Phones	
	Connectors	
	Electrical/Electronic Applications	
	Housings	
	Industrial Applications	

Descriptive Properties	Value	Comments
	Metal Replacement	
	Transmission Applications	

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