

Solvay Specialty Polymers Amodel® AS-4145 HS Polyphthalamide (PPA), 45% Glass Fiber (Conditioned)

Category : Polymer , Thermoplastic , Polyphthalamide (PPA) , Polyphthalamide (PPA), 50% Glass Fiber Reinforced

Material Notes:

Amodel® AS-4145 HS polyphthalamide (PPA) is a 45% glass reinforced resin that is hot-water moldable. Key properties include high heat resistance, high strength and stiffness over a broad temperature range, low moisture absorption, excellent chemical resistance and excellent electrical properties. Features: Fast Molding Cycle; Good Chemical Resistance; Good Creep Resistance; Good Dimensional Stability; Good Stiffness; Heat Stabilized; High Heat Resistance; High Strength; Hot Water Moldability; Low Moisture Absorption; Lubricated Uses: Abrasive Cleaning Material; Automotive Applications; Automotive Electronics; Automotive Under the Hood; Connectors; General Purpose; Housings; Industrial Applications; Industrial Parts; Lawn and Garden Equipment; Machine/Mechanical Parts; Metal Replacement; Thick-walled Parts; Valves/Valve Parts Injection Molding Notes: Amodel® compounds are shipped in moisture-resistant packages at moisture levels according to specifications. Sealed, undamaged bags should be preferably stored in a dry room at a maximum temperature of 50°C (122°F) and should be protected from possible damage. If only a portion of a package is used, the remaining material should be transferred into a sealable container. It is recommended that Amodel® resins be dried prior to molding. Automotive Specifications ASTM D6779 PA102G45; TYCO 100-1632 Color: BK-324 Black Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Amodel-AS-4145-HS-Polyphthalamide-PPA-45-Glass-Fiber-Conditioned.php

Physical Properties	Metric	English	Comments
Density	1.55 g/cc	0.0560 lb/in ³	Dry; ISO 1183
Filler Content	45 %	45 %	Glass Fiber
Linear Mold Shrinkage, Flow	0.0050 cm/cm	0.0050 in/in	Dry
Linear Mold Shrinkage, Transverse	0.010 cm/cm	0.010 in/in	Dry; ASTM D955

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	186 MPa	27000 psi	ASTM D638
Elongation at Break	2.1 %	2.1 %	ASTM D638
Tensile Modulus	15.2 GPa	2200 ksi	ASTM D638
Flexural Yield Strength	269 MPa	39000 psi	ASTM D790
Flexural Modulus	13.1 GPa	1900 ksi	ASTM D790
Compressive Strength	159 MPa	23100 psi	ASTM D695
Shear Strength	75.8 MPa	11000 psi	ASTM D732
Izod Impact, Notched	0.960 J/cm	1.80 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
Melting Point	320 Â°C	608 Â°F	Dry; ISO 11357-3

Electrical Properties	Metric	English	Comments
Volume Resistivity	6.00e+14 ohm-cm	6.00e+14 ohm-cm	ASTM D257
Dielectric Constant	4.0	4.0	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	4.9	4.9	ASTM D150
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
Dielectric Strength	25.0 kV/mm	635 kV/in	ASTM D149
	@Thickness 1.59 mm	@Thickness 0.0626 in	
Dissipation Factor	0.024	0.024	ASTM D150
	@Frequency 60.0 Hz	@Frequency 60.0 Hz	
Dissipation Factor	0.037	0.037	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	600 V	600 V	UL 746
High Voltage Arc-Tracking Rate, HVTR	14.0 mm/min	0.551 in/min	UL 746

Processing Properties	Metric	English	Comments
Processing Temperature	79.4 Â°C	175 Â°F	Hopper
Rear Barrel Temperature	318 - 324 Â°C	604 - 615 Â°F	
Front Barrel Temperature	327 - 332 Â°C	621 - 630 Â°F	
Melt Temperature	329 - 343 Â°C	624 - 649 Â°F	
Mold Temperature	65.6 - 93.3 Â°C	150 - 200 Â°F	
Drying Temperature	121 Â°C	250 Â°F	
	@Time 14400 sec	@Time 4.00 hour	
Moisture Content	<= 0.10 %	<= 0.10 %	

Descriptive Properties	Value	Comments
Additive	Heat Stabilizer	

Descriptive Properties	Value	Comments
	Mold Release	
Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	Latin America	
	North America	
Color	Black	
Form	Pellets	
Processing Technique	Water-Heated Mold Injection Molding	
RoHS Compliance	RoHS Compliant	

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