

## Solvay Specialty Polymers Amodel® AF-1550 V0 Polyphthalamide (PPA) Resin, 50% Glass/Mineral Reinforced, at 50% RH &

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

### Material Notes:

Data provided by the manufacturer, Amoco Corporation. AMODEL AF-1550 V0 resin is a 50% glass/mineral reinforced, flame retarded polyphthalamide (PPA) that features: high deflection temperature, high tensile strength, high flexural modulus, low warpage, excellent dimensional stability, and low moisture absorption. This grade was designed specifically to be cost effective when high stiffness, good dimensional stability, and superior electrical properties are required. With a comparative tracking index of 450 volts and a deflection temperature of 505°F (263°C), this resin is a potential thermoset replacement in many electrical applications. Potential applications for AMODEL AF-1550 V0 resin include electrical relays, housings, motor starters, contactors, circuit breakers, and terminal blocks. This grade of AMODEL resin can also withstand the demanding vapor phase and infrared reflow soldering processes commonly used in the electronics industry for connectors and devices requiring surface mount technology. This product line was acquired by Solvay Advanced Polymers from BP Amoco in November 2001. MatWeb has an entry for this material dry as molded.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Solvay-Specialty-Polymers-Amodel-AF-1550-V0-Polyphthalamide-PPA-Resin-50-GlassMineral-Reinforced-at-50-RH-.php](http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Amodel-AF-1550-V0-Polyphthalamide-PPA-Resin-50-GlassMineral-Reinforced-at-50-RH-.php)

Physical Properties	Metric	English	Comments
Density	1.82 g/cc	0.0658 lb/in <sup>3</sup>	Dry As Molded

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	116 MPa	16800 psi	ASTM D638
Elongation at Break	1.0 %	1.0 %	ASTM D638
Tensile Modulus	16.5 GPa	2390 ksi	ASTM D638
Flexural Yield Strength	177 MPa	25700 psi	ASTM D790
Flexural Modulus	14.1 GPa	2050 ksi	ASTM D790
Izod Impact, Notched	0.590 J/cm	1.11 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
Deflection Temperature at 1.8 MPa (264 psi)	243 °C	469 °F	ASTM D648

Electrical Properties	Metric	English	Comments
Dielectric Constant	4.6	4.6	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
	4.7	4.7	

Electrical Properties	Metric	English	ASTM D150 Comments
Dissipation Factor	0.018	0.018	ASTM D150
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.026	0.026	ASTM D150
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	

Processing Properties	Metric	English	Comments
Melt Temperature	321 - 338 °C	610 - 640 °F	Injection

## Contact Songhan Plastic Technology Co.,Ltd.

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