Amodel® AE-8930

polyphthalamide

Amodel® AE-8930 is a 30% glass reinforced polyphthalamide (PPA) designed to work in the modern automotive electrical environment.

This grade features a high heat deflection temperature, high flexural modulus and high tensile strength, as well as excellent creep resistance and low moisture absorption.

- Black: AE-8930 BK938

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Features	• Glycol Resistant • Good Chemical Resistance • Good Creep Resistance • Good Dimensional Stability	• Good Stiffness • High Heat Resistance • High Stiffness • High Strength	• High Temperature Strength • Low Moisture Absorption • Non-Corrosive
Uses	• Automotive Electronics • Connectors	• Electrical Parts • Electrical/Electronic Applications	
RoHS Compliance	• Contact Manufacturer		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Typical Value	Unit	Test method
Density	1.45	g/cm³	ISO 1183/A

Mechanical	Typical Value	Unit	Test method
Tensile Modulus (23°C)	11900	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	210	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.3	%	ISO 527-2
Flexural Modulus (23°C)	11000	MPa	ISO 178
Flexural Stress (23°C)	300	MPa	ISO 178
Flexural Strain	2.9	%	ISO 178

Impact	Typical Value	Unit	Test method
Charpy Notched Impact Strength (23°C)	7.2	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	56	kJ/m²	ISO 179/1eU
Notched Izod Impact Strength (23°C)	7.2	kJ/m²	ISO 180/1A

Amodel® AE-8930
polyphthalamide

Thermal	Typical Value	Unit	Test method
Heat Deflection Temperature			ISO 75-2/A
1.8 MPa, Unannealed	290	°C	
Glass Transition Temperature	135	°C	DSC
Melting Temperature	325	°C	ISO 11357-3

Electrical	Typical Value	Unit	Test method
Dielectric Constant			ASTM D150
60 Hz	4.35		
1 MHz	4.02		
Dissipation Factor (60 Hz)	7.0E-3		ASTM D150

Flammability	Typical Value	Unit	Test method
Flame Rating [1] (3.20 mm)	HB		UL 94

Injection	Typical Value	Unit
Drying Temperature	120	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.030 to 0.060	%
Rear Temperature	316 to 330	°C
Middle Temperature	316 to 330	°C
Front Temperature	324 to 340	°C
Processing (Melt) Temp	330 to 350	°C
Mold Temperature	150 to 165	°C

Injection Notes

Injection Rate: 3-4 inch/second (7.5-10 cm/sec)
Holding Pressure: 50% of injection pressure

Storage:

- 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 following the recommendations found in this datasheet and/or in the Amodel® processing guide.

Amodel® AE-8930
polyphthalamide

Notes

Typical properties: these are not to be construed as specifications.

[1] These flammability ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

www.solvay.com

SpecialtyPolymers.EMEA@solvay.com | Europe, Middle East and Africa
SpecialtyPolymers.Americas@solvay.com | Americas
SpecialtyPolymers.Asia@solvay.com | Asia and Australia

Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

SOLVAY
asking more from chemistry®