

Raschig Group AMPLA® 2000 melamine-modified polyester

Category : Polymer , Thermoset , Filled/Reinforced Thermoset

Material Notes:

Halogen-free, organically and inorganically filled melamine-modified Polyester molding compound. Low post-shrinkage, very good electrical values, high heat resistance, very good sliding behavior, very good wear stability. This product meets the allowed upper limits for heavy metals and PCAs and also conforms to the requirements of the EU directives 2002/95 (RoHS), 2002/96 (WEEE) and 2006/122 (PFOS) Processing: Injection and compression molding Applications: Molded parts in electrical engineering, mainly electrical parts such as circuit breakers, relays, switches, contact terminals. Information provided by the Raschig Group

Order this product through the following link:

http://www.lookpolymers.com/polymer_Raschig-Group-AMPLA-2000-melamine-modified-polyester.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.70 - 1.80 g/cc	1.70 - 1.80 g/cc	ISO 1183
Apparent Bulk Density	0.750 - 0.950 g/cc	0.0271 - 0.0343 lb/in³	ISO 60
Water Absorption	<= 0.80 % @Temperature 23.0 °C, Time 86400 sec	<= 0.80 % @Temperature 73.4 °F, Time 24.0 hour	ISO 62
Linear Mold Shrinkage	0.0070 - 0.010 cm/cm	0.0070 - 0.010 in/in	Injection and Compression; ISO 2577

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	30.0 - 50.0 MPa	4350 - 7250 psi	Compression; ISO 527
	45.0 - 55.0 MPa	6530 - 7980 psi	Injection; ISO 527
Modulus of Elasticity	5.00 - 7.00 GPa	725 - 1020 ksi	Compression; ISO 527
	9.00 - 10.0 GPa	1310 - 1450 ksi	Injection; ISO 527
Flexural Strength	60.0 - 90.0 MPa	8700 - 13100 psi	Compression; ISO 178
	90.0 - 110 MPa	13100 - 16000 psi	Injection; ISO 178
Flexural Modulus	6.00 - 8.00 GPa	870 - 1160 ksi	Compression; ISO 178
	9.00 - 11.0 GPa	1310 - 1600 ksi	Injection; ISO 178
Compressive Strength	150 - 200 MPa	21800 - 29000 psi	ISO 604
Charpy Impact Unnotched	0.600 - 0.800 J/cm² @Temperature 23.0 °C	2.86 - 3.81 ft-lb/in² @Temperature 73.4 °F	Compression; ISO 179/ 1eU
	0.900 - 1.10 J/cm² @Temperature 23.0 °C	4.28 - 5.24 ft-lb/in² @Temperature 73.4 °F	Injection; ISO 179/ 1eU

Mechanical Properties	Metric	English	Comments
Charpy Impact, Notched	0.150 - 0.250 J/cm²	0.114 - 1.19 ft-lb/in²	Compression; ISO 179/ 1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	0.200 - 0.300 J/cm²	0.952 - 1.43 ft-lb/in²	Injection; ISO 179/ 1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	20.0 - 30.0 µm/m-°C	11.1 - 16.7 µin/in-°F	ISO 11359-2
	@Temperature 50.0 - 100 °C	@Temperature 122 - 212 °F	
Thermal Conductivity	0.600 - 0.700 W/m-K	4.16 - 4.86 BTU-in/hr-ft²-°F	ASTM E1461
Maximum Service Temperature, Air	140 °C	284 °F	20,000 h; IEC 216/T1
	190 °C	374 °F	< 50 h; IEC 216/T1
Deflection Temperature at 1.8 MPa (264 psi)	>= 200 °C	>= 392 °F	ISO 75-A
Deflection Temperature at 8.0 MPa	80.0 - 110 °C	176 - 230 °F	ISO 75-C
Flammability, UL94	V-0	V-0	
	@Thickness 0.750 mm	@Thickness 0.0295 in	
Shrinkage	0.20 - 0.40 %	0.20 - 0.40 %	Post shrinkage; ISO 2577
	@Temperature 110 °C, Time 605000 sec	@Temperature 230 °F, Time 168 hour	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 - 1.00e+14 ohm-cm	1.00e+13 - 1.00e+14 ohm-cm	IEC 60093
Surface Resistance	1.00e+12 - 1.00e+13 ohm	1.00e+12 - 1.00e+13 ohm	IEC 60093
Dielectric Constant	4.0 - 5.0	4.0 - 5.0	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	5.0 - 7.0	5.0 - 7.0	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	30.0 - 40.0 kV/mm	762 - 1020 kV/in	IEC 60243-1
Dissipation Factor	0.030 - 0.050	0.030 - 0.050	IEC 60250
	@Frequency 1.00e+6	@Frequency 1.00e+6	

Electrical Properties	Hz Metric	Hz English	Comments
	0.10 - 0.20	0.10 - 0.20	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Comparative Tracking Index	600 V	600 V	CTI; IEC 60112

Processing Properties	Metric	English	Comments
	6.00 Month	6.00 Month	
Shelf Life	@Temperature 15.0 - 25.0 °C	@Temperature 59.0 - 77.0 °F	

Descriptive Properties	Value	Comments
Arc Resistance	4 Stufe	ASTM D495
Glow wire ignitability test	825/1	IEC 60695 2-13
Glow-wire flammability test	960/1	IEC 60695 2-12
Water Absorption	<50 mg	ISO 62; 24h / 23°C

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