AMPAL® MPV 7270

Thermoset Polyester

RASCHIG GmbH

Message:

Inorganically filled melamine-modified Polyester moulding compound
Low post-shrinkage and distortion tendencies, very good electrical values, excellent surface quality and dimensional stability at elevated temperatures
Moulded parts in electrical engineering, Fittings for household appliances, Car ash-trays
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)

General Information	
Filler / Reinforcement	Inorganic
Features	Good Dimensional Stability Good Electrical Properties Good Surface Finish Low Shrinkage
Uses	Appliance Components Electrical Parts Fittings
Agency Ratings	EU 2002/96/EC (WEEE) EU 2006/122/EC
RoHS Compliance	RoHS Compliant
Forms	Granules
Processing Method	Compression Molding Injection Molding

Physical	Nominal Value	Unit	Test Method
Density	1.70 to 1.80	g/cm³	ISO 1183
Apparent Density	0.80 to 1.00	g/cm³	ISO 60
Molding Shrinkage - Flow			ISO 2577
-- [1]	0.50 to 0.80	%	
-- [2]	0.70 to 1.0	%	
Water Absorption (23°C, 24 hr)	< 1.0	%	ISO 62
Post Shrinkage [3]	0.20 to 0.40	%	ISO 2577
Maximum Service Temperature			IEC 60216
<50 h	190	°C	
20,000 h	150	°C	
Compression Molding Molding Pressure	> 10.0	MPa	

Compression Molding Temperature	160 to 180	°C	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus			ISO 527-2
Compression Molded	4000 to 6000	MPa	
Injection Molded	5000 to 7000	MPa	
Tensile Stress			ISO 527-2
Compression Molded	30.0 to 50.0	MPa	
Injection Molded	50.0 to 60.0	MPa	
Flexural Modulus			ISO 178
Compression Molded	8000 to 9000	MPa	
Injection Molded	8000 to 9000	MPa	
Flexural Stress			ISO 178
Compression Molded	70.0 to 90.0	MPa	
Injection Molded	90.0 to 110	MPa	
Compressive Stress	150 to 200	MPa	ISO 604
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
Compression Molded	1.5 to 2.5	kJ/m^2	
Injection Molded	1.5 to 2.5	kJ/m^2	
Charpy Unnotched Impact Strength			ISO 179/1eU
Compression Molded	8.0 to 10	kJ/m^2	
Injection Molded	10 to 12	kJ/m^2	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
1.8 MPa, Unannealed	180 to 200	°C	ISO 75-2/A
8.0 MPa, Unannealed	80.0 to 110	°C	ISO 75-2/C
CLTE - Flow (50 to 100°C)	2.0E-5 to 3.0E-5	cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.50 to 0.60	W/m/K	ASTM E1461
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0E+11 to 1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+12 to 1.0E+13	ohms·cm	IEC 60093
Electric Strength	30 to 40	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
	7.00		
100 Hz	5.00		
	5.00		
1 MHz	4.00		

Dissipation Factor			IEC 60250
100 Hz	0.10 to 0.20		
1 MHz	0.030 to 0.050		
Arc Resistance	PLC 4		ASTM D495
Comparative Tracking Index	600	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (1.50 mm, Tested by RASCHIG)	HB		UL 94
Injection	**Nominal Value**	**Unit**	
Middle Temperature	50.0 to 75.0	°C	
Front Temperature	80.0 to 100	°C	
Processing (Melt) Temp	100 to 115	°C	
Mold Temperature	165 to 180	°C	
Back Pressure	0.800 to 1.20	MPa	
Screw Speed	80 to 120	rpm	
NOTE			
1.	Compression Molded		
2.	Injection Molded		
3.	168 h / 110°C		

Recommended distributors for this material

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