

MALAT 37G307 - 7809

Polybutylene Terephthalate

AD majoris

Message:

MALAT 37G307 - 7809 is a 30 % glass fibre reinforced polybutylene terephthalate, intended for injection moulding. The product is available in grey and natural (MALAT 37G307) but other colours can be provided on request.

This product is UV stabilized.

They combine high mechanical, thermal and electrical properties with excellent chemical resistance and dimensional stability

APPLICATIONS

MALAT 37G307 - 7809 is intended for the injection moulding of electrical components and automotive applications including interior, exterior and electrical and mechanical systems, such as:

Electrical appliance components

Switches and connector housings

Dashboard components

Door handles and pillar trim

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 30% filler by weight		
Additive	UV stabilizer		
Features	Good dimensional stability		
	Good UV resistance		
	Recyclable materials		
	Good electrical performance		
	Good chemical resistance		
Uses	Handle		
	Electrical components		
	Electrical housing		
	Home appliance components		
	Automotive Electronics		
	Car interior parts		
	Automotive exterior parts		
Appearance	Grey		
	Available colors		
	Natural color		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Density	1.53	g/cm ³	ISO 1183
Molding Shrinkage ¹			
Vertical flow direction: 3.00mm	0.90	%	

Flow direction: 3.00mm	0.50	%	
Water Absorption			ISO 62
23°C, 24 hr	0.040	%	ISO 62
Equilibrium, 23°C, 50% RH	0.13	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	10200	MPa	ISO 527-2
Tensile Stress (Break)	140	MPa	ISO 527-2
Tensile Strain (Break)	2.5	%	ISO 527-2
Flexural Modulus	8700	MPa	ISO 178
Flexural Stress ²	240	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	13	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	45	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, not annealed	220	°C	ISO 75-2/B
1.8 MPa, not annealed	210	°C	ISO 75-2/A
Ball Pressure Test (215°C)	Pass		NF C 62-411
Melting Temperature (DSC)	225	°C	ISO 3146
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+15	ohms	ASTM D257
Volume Resistivity	1.0E+15	ohms · cm	ASTM D257
Dielectric Strength (2.00 mm)	39	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
50 Hz	3.20		ASTM D150
1 kHz	3.20		ASTM D150
1 MHz	3.10		ASTM D150
Dissipation Factor			ASTM D150
50 Hz	1.0E-3		ASTM D150
1 kHz	1.0E-3		ASTM D150
1 MHz	0.014		ASTM D150
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94
Glow Wire Ignition Temperature (2.00 mm, 30 sec)	750	°C	IEC 60695-2-13
Oxygen Index	19	%	ISO 4589-2
Injection	Nominal Value	Unit	
Drying Temperature	120	°C	
Drying Time	4.0	hr	
Processing (Melt) Temp	255 - 270	°C	
Mold Temperature	80.0 - 120	°C	
Injection Rate	Fast		

Injection instructions

Back pressure: Moderate

NOTE

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|----|--------------------|
| 1. | Plate 100x100x3 mm |
| 2. | at Break |

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