

LEMALLOY™ C61HL

Mitsubishi Engineering-Plastics Corp - Polyphenylene Ether + PA 66

General Information

Product Description

Un-reinforced PPE/PA66 alloy; Thermal aging resistance, High

General

Features	• Thermal Aging Resistant	
Uses	• Automotive Applications	• Electrical/Electronic Applications
	• Automotive Electronics	• General Purpose

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.10	--	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR)				ISO 1133
280°C/5.0 kg	31	--	cm ³ /10min	
Molding Shrinkage				Internal Method
Across Flow : 3.20 mm	1.1 to 1.3	--	%	
Flow : 3.20 mm	1.1 to 1.3	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	2500	1600	MPa	ISO 527-1/1
Tensile Stress (Yield)	66.0	51.0	MPa	ISO 527-2/50
Tensile Strain				ISO 527-2/50
Yield	5.3	11	%	
Break	42	73	%	
Flexural Modulus ²	2300	1700	MPa	ISO 178
Flexural Stress ²	90.0	71.0	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
23°C	20	45	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179
23°C	No Break	No Break		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	185	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	105	--	°C	ISO 75-2/A
CLTE - Flow	9.0E-5	--	cm/cm/°C	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	5.0E+14	--	ohms	IEC 60093
Volume Resistivity	1.0E+16	--	ohms·cm	IEC 60093
Electric Strength				IEC 60243-1
1.00 mm	30	--	kV/mm	
3.00 mm	17	--	kV/mm	

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Electrical	Dry	Conditioned	Unit	Test Method
Dielectric Constant				IEC 60250
1 MHz	3.20	--		
100 MHz	3.30	--		
Dissipation Factor				IEC 60250
1 MHz	9.4E-3	--		
100 MHz	4.0E-3	--		

Additional Information	
Conditioned	Conditioned to 50% RH

Processing Information		
Injection	Dry	Unit
Drying Temperature - Hot Air Dryer	110 to 120	°C
Drying Time - Hot Air Dryer	2.0 to 4.0	hr
Rear Temperature	240 to 270	°C
Middle Temperature	250 to 290	°C
Front Temperature	250 to 290	°C
Nozzle Temperature	250 to 290	°C
Mold Temperature	60 to 100	°C
Injection Pressure	20.0 to 150	MPa
Injection Rate	Moderate	
Screw Speed	60 to 150	rpm

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 mm/min

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