LEMALLOY C82HL

(PPE+PA66) Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**90 / ***	cm³/10min	ISO 1133
Temperature	**280 / ***	°C	-
Load	**5 / ***	kg	-
Molding shrinkage, parallel	**1.2 / ***	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.2 / ***	%	ISO 294-4, 2577

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	**2600 / 1500**	MPa	ISO 527
Yield stress	**60 / 45**	MPa	ISO 527
Yield strain	**4.8 / 19**	%	ISO 527
Strain at break	**47 / 88**	%	ISO 527
Flexural modulus, 23°C	**2400 / 1500**	MPa	ISO 178
Flexural strength	**90 / 60**	MPa	ISO 178
Charpy impact strength, +23°C	**N / N**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	**20 / 62**	kJ/m²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**70 / ***	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**165 / ***	°C	ISO 75-1/-2

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**3.2 / -**	-	IEC 62631-2-1
Dissipation factor, 1MHz	**120 / -**	E-4	IEC 62631-2-1
Volume resistivity	**2E13 / -**	Ohm*m	IEC 62631-3-1
Surface resistivity	*** / 7E14**	Ohm	IEC 62631-3-2
Electric strength	**33 / -**	kV/mm	IEC 60243-1

Other properties	dry / cond	Unit	Test Standard
Density	**1130 / -**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**110 - 120**	°C	-
Pre-drying - Time	**2 - 4**	h	-
Mold temperature	**60 - 100**	°C	-
Zone 1	**240 - 260**	°C	-
Zone 2	**250 - 280**	°C	-
Zone 3	**250 - 280**	°C	-
Nozzle temperature	**250 - 280**	°C	-
Screw speed	**60 - 150**	rpm	-
Injection pressure	**20 - 150**	MPa	-

Characteristics

Processing

Injection Molding

Applications

Automotive, Electrical and Electronical, General Purpose

Features

Acoustical Barrier Properties

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa