

LEMALLOY C61HL

(PPE+PA66)

Mitsubishi Engineering-Plastics Corporation

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	31 / *	cm ³ /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	2500 / 1600	MPa	ISO 527
Yield stress	66 / 51	MPa	ISO 527
Yield strain	5.3 / 11.4	%	ISO 527
Strain at break	42 / 73	%	ISO 527
Flexural modulus, 23°C	2300 / 1700	MPa	ISO 178
Flexural strength	90 / 71	MPa	ISO 178
Charpy impact strength, +23°C	N / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	20 / 45	kJ/m ²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	105 / *	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	185 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	90 / *	E-6/K	ISO 11359-1/-2

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.2 / -	-	IEC 62631-2-1
Dissipation factor, 1MHz	94 / -	E-4	IEC 62631-2-1
Volume resistivity	1E14 / -	Ohm*m	IEC 62631-3-1
Surface resistivity	* / 5E14	Ohm	IEC 62631-3-2
Electric strength	30 / -	kV/mm	IEC 60243-1

Other properties	dry / cond	Unit	Test Standard
Density	1100 / -	kg/m ³	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 - 270	°C	-
Zone 2	250 - 290	°C	-
Zone 3	250 - 290	°C	-
Nozzle temperature	250 - 290	°C	-
Screw speed	60 - 150	rpm	-
Injection pressure	20 - 150	MPa	-

Characteristics**Processing**

Injection Molding

Features

Thermal Stability

Applications

Automotive, Electrical and Electronical, General Purpose

Regional Availability

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