

## LATIOHM 87/28-05 PD01 G/10

Partially conductive/dissipative compound based on Polycarbonate (PC).  
Glass fibres.

PHYSICAL PROPERTIES - Typical values	STANDARD	VALUE	MEASURE UNITS
Density	ISO 1183	1.28	g/cm <sup>3</sup>
Linear shrinkage at moulding - 0.078 in thickness (at 8,700 psi of cavity pressure)			
Longitudinal	ISO 294-4	0.003 ÷ 0.004	in/in
Transversal	ISO 294-4	0.005 ÷ 0.006	in/in
MECHANICAL PROPERTIES - Typical values			
IZOD impact strength (sample 2.5x0.5x0.125 in)			
Notched, at +73°F	ASTM D256-A	2.16	ft.lb/in
CHARPY impact strength (sample 3.149x0.393x0.157 in)			
Unnotched, at +73°F	ISO 179-1eU	16.36	ft.lb/in <sup>2</sup>
Notched, at +73°F	ISO 179-1eA	4.67	ft.lb/in <sup>2</sup>
Tensile elongation (speed 0.196 in/min)			
At break, 73°F	ISO 527 (1)	1.8	%
Tensile strength (speed 0.196 in/min)			
At break, 73°F	ISO 527 (1)	14,500	psi
Elastic modulus			
Tensile (speed 0.04 in/min), at 73°F	ISO 527 (1)	1,088	kpsi



## LATIOHM 87/28-05 PD01 G/10

Partially conductive/dissipative compound based on Polycarbonate (PC).  
Glass fibres.

THERMAL PROPERTIES - Typical values		STANDARD	VALUE MEASURE UNITS
<b>VICAT - Softening point</b>			
2,2 lb (heating rate 11°F/h)		ISO 306	302 °F
<b>HDT - Heat Deflection Temperature</b>			
66 psi		ISO 75	293 °F
264 psi		ISO 75	284 °F
<b>FLAMMABILITY - Typical values</b>			
<b>GWIT - Glow Wire Ignition Test</b>			
		IEC 695-2-13	GWIT: 850/1.0mm
		IEC 695-2-13	GWIT: 850/2.0mm
<b>ELECTRICAL PROPERTIES - Typical values</b>			
<b>Electrical resistivity</b>			
Surface		ASTM D 257	2E3 ohm
Volume		ASTM D 257	3E3 ohm.cm

## **LATIOHM 87/28-05 PD01 G/10**

Partially conductive/dissipative compound based on Polycarbonate (PC).  
Glass fibres.

### **PREDRYING CONDITIONS**

At least 3 hours at 230 ÷ 265°F

These are the suggested conditions to reduce the moisture content to adequate levels. Temperature and drying time are reduced when using vacuum ovens. A particularly wet material may need longer drying time.

### **ACTUAL MELT TEMPERATURE**

525 ÷ 610°F

The injection machine settings needed to obtain the suggested melt temperature will depend greatly on shot size and machine capacity, as well as other molding parameters such as: injection speed, screw RPM, back pressure, etc. On small machines, running short cycles, it is possible to use higher melt temperatures to improve plastification, fluidity and surface appearance, paying attention to any indication of material degradation.

### **MOLD TEMPERATURE**

175 ÷ 230°F

The mold temperature suggested above is the actual steel temperature. This can be significantly different from the tool settings, due to the cooling system efficiency and the accuracy of the temperature control on the tool.

### **INJECTION SPEED**

High

The advisable injection speed greatly depends on cavity geometry and injection machine size. The use of high injection speed can improve the surface appearance, but it can also cause outgassing and burn marks due to overheating through shear stress.

### **REGRIND USAGE**

The use of regrind is possible, but should be assessed on the basis of the project, moulding parameters, and type of grinding. The effect of using regrind on material properties must be evaluated by the customer on its specific project and process. High percentages of regrind can cause a reduction in viscosity and fibre length, reducing mechanical properties, reducing mechanical properties

### **HOT RUNNER MOULDS**

Hot runner moulds can be used when a very tight temperature control is assured.

## **LATIOHM 87/28-05 PD01 G/10**

Partially conductive/dissipative compound based on Polycarbonate (PC).  
Glass fibres.

### **TO AVOID**

Shut-off nozzles and internally heated hot runners have to be avoided. In order to prevent any material degradation, over-dimensioned machines should be avoided.

### **CONTACTS**

**LATI Industria Termoplastici S.p.A.**