



# **LUPOX LW5300M**

Injection Molding, PBT+PC+MF30%

### **Description**

Low Warpage

### **Application**

Automotive(Head Lamp Bezel)

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.54
Molding Shrinkage		ASTM D955	%	0.7 ~ 0.9
Melt Flow Rate	265°C/2.16kg	ASTM D1238	g/10min	21
Water Absorption	23℃, 24hrs	ASTM D570	%	0.06
Mechanical				
Tensile Strength, 3.2mm		ASTM D638		
@ Break	5mm/min		kg/cm <sup>2</sup>	670
Tensile Elongation, 3.2mm		ASTM D638	•	
@ Yield	5mm/min		%	-
@ Break	5mm/min		%	3.0
Flexural Strength, 6.4mm	5mm/min	ASTM D790	kg/cm <sup>2</sup>	1,100
Flexural Modulus, 6.4mm	5mm/min	ASTM D790	kg/cm <sup>2</sup>	60,000
IZOD Impact Strength, 6.4mm		ASTM D256		
(Notched)	<b>23</b> ℃		kg-cm/cm	4.2
IZOD Impact Strength, 3.2mm		ASTM D256		
(Notched)	23℃		kg-cm/cm	4.5
Γhermal				
Melt Temperature		ASTM D3418	$^{\circ}$	223
Heat Deflection Temperature, 6.4mm		ASTM D648		
(Unannealed)	18.6kg		${\mathbb C}$	120
,	4.6kg		${\mathbb C}$	165
Flammability	-	UL94	class	-
Relative Temperature Index		UL 746B		
Electrical			${\mathbb C}$	-
Mechanical with Impact			${\mathbb C}$	-
Mechanical without Impact			${\mathbb C}$	-
Electrical				
Comparative Tracking Index(CTI)	Solution A	UL 746	PLC	-
Volume Resistivity	<b>23</b> ℃	ASTM D257	Ohm-cm	-
Arc Resistance	23℃	ASTM D495	PLC	-
Dielectric Strength, 1mm	<b>23</b> ℃	ASTM D149	kV/mm	-

Note) All properties, except melt flow rate are measured on injection molulded specimens and after 48 hours storage at  $23^{\circ}$ C, 50% relative humidty.

Updated: 1-Jul-14

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### **Processing Guide (Injection Molding)**

Processi	Processing Parameters Unit		Value
Drying Temperature		${\mathbb C}$	120
Drying Time		hrs	4 ~ 5
Maximum Moisture Content		%	0.02
Melt Temperature		${\mathbb C}$	245 ~ 255
	Rear	${\mathbb C}$	255 ~ 255
Cylinder Temperature	Middle	${\mathbb C}$	255 ~ 260
	Front	${\mathbb C}$	255 ~ 265
Nozzle Temperature		${\mathbb C}$	255 ~ 265
Mold Temperature		${\mathbb C}$	60 ~ 100
Back Pressure		kg/cm <sup>2</sup>	-
Screw Speed	_	rpm	-

Note) Back Pressure & Screw Speed are only mentioned as general guidelines.

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These may not apply or need adjustment in specific situations such as low shot sizes, thin wall molding and gas-assist molding.