

# LUPOX GP2206F

Injection Molding, PBT+20%GF

## Description

Flame Retardant

## Application

IT/OA, E&E

Properties	Test Condition	Test Method	Unit	Typical Value
<b>Physical</b>				
Specific Gravity		ASTM D792	-	1.58
Molding Shrinkage (Flow), 3.2mm		ASTM D955	%	0.4~1.0
Melt Flow Rate	250°C/2.16kg	ASTM D1238	g/10min	-
<b>Mechanical</b>				
Tensile Strength, 3.2mm		ASTM D638		
@ Yield	5mm/min		kg/cm <sup>2</sup>	1100
Tensile Elongation, 3.2mm		ASTM D638		
@ Yield	5mm/min		%	
@ Break	5mm/min		%	3
Tensile Modulus, 3.2mm	5mm/min	ASTM D638	kg/cm <sup>2</sup>	-
Flexural Strength, 3.2mm	1.3mm/min	ASTM D790	kg/cm <sup>2</sup>	1,700
Flexural Modulus, 3.2mm	1.3mm/min	ASTM D790	kg/cm <sup>2</sup>	60,000
IZOD Impact Strength, 6.4mm (Notched)	23°C -30°C	ASTM D256	kg-cm/cm kg-cm/cm	6
Rockwell Hardness	R-Scale	ASTM D785	-	
<b>Thermal</b>				
Melt Temperature @ Break		ASTM D3418	°C	-
Heat Deflection Temperature, 6.4mm (Unannealed)	18.6kg 4.6kg	ASTM D648	°C °C	200 210
Vicat Softening Temperature	5kg, 50°C/h	ASTM D1525	°C	
Ball Pressure Temperature		IEC 60695-10-2	°C	
Burning Rate, 3.2mm		FMVSS 302	mm	
Flammability		UL94		
0.71mm			class	V-0
1.5mm			class	V-0
3.0mm			class	V-0
Relative Temperature Index		UL 746B		
Electrical			°C	130
Mechanical with Impact			°C	130
Mechanical without Impact			°C	140

Note) Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Values given should not be interpreted as specification and not be used for part or tool design.

All properties, except melt flow rate are measured on injection molded specimens and after 48 hours storage at 23°C, 50% relative humidity.

Updated : Oct-30, 2012

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## Electrical

Property	Condition	Standard	Unit	Value
Comparative Tracking Index(CTI)	Solution A	IEC 60112	Volts	
Surface Resistivity		IEC 60093	Ohm	
Volume Resistivity	23°C	ASTM D257	Ohm·m	1.0E+16
Arc Resistance	23°C	ASTM D495	Ohm·cm	-
Dielectric Strength, 1mm	23°C	ASTM D149	kV/mm	23
Dielectric Constant (10 <sup>6</sup> Hz)	23°C	ASTM D150	sec	-

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## Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		°C	120
Drying Time		hrs	4~5
Minimum Moisture Content		%	0.02
Melt Temperature		°C	245~255
Cylinder Temperature	Rear	°C	235 ~ 250
	Middle	°C	240 ~ 250
	Front	°C	245 ~ 255
Nozzle Temperature		°C	245 ~ 255
Mold Temperature		°C	60 ~ 100
Back Pressure		kg/cm <sup>2</sup>	-
Screw Speed		rpm	-

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

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

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