

# POM

## GC210

### Product information

Part Marking Code	POM-GF10
Material Shape	Pellets
Process	Injection molding
FR	HB
Material Attribute	10% fiberglass reinforcement
Specification	UL
Features	rigidity
Application	Bearing water pump accessories
UL File NO.	E67171

UL	Condition	Standard	Value	Unit
RTI	Elec All Color 0.75mm	UL 746B	100	°C
RTI	Elec All Color 1.5mm	UL 746B	100	°C
RTI	Elec All Color 3.0mm	UL 746B	100	°C
RTI	Imp All Color 0.75mm	UL 746B	95	°C
RTI	Imp All Color 1.5mm	UL 746B	95	°C
RTI	Imp All Color 3.0mm	UL 746B	95	°C
RTI	Str All Color 0.75mm	UL 746B	100	°C
RTI	Str All Color 1.5mm	UL 746B	100	°C
RTI	Str All Color 3.0mm	UL 746B	100	°C
Flame Rating	All Color 0.75mm	UL94	HB	
Flame Rating	All Color 1.5mm	UL94	HB	
Flame Rating	All Color 3.0mm	UL94	HB	

Electrical properties	Condition	Standard	Value	Unit
Surface Resistivity		ASTM D257	1E14	Ω
Volume Resistivity	23°C	ASTM D257	1E16	Ω.cm

Mechanical behavior	Condition	Standard	Value	Unit
Tensile Strength	Yield 5mm/min 3.2mm	ASTM D638	98.03	MPa
Elongation	Fracture 5mm/min 3.2mm	ASTM D638	5	%
Flexural Modulus	1.3mm/min 3.2mm	ASTM D790	4901.96	MPa
Flexural Strength	1.3mm/min 3.2mm	ASTM D790	127.45	MPa
Izod Notch Impact	23°C 6.4mm	ASTM D256	5	kJ/m <sup>2</sup>

Thermal	Condition	Standard	Value	Unit
HDT	Unannealed 0.45MPa 6.4mm	ASTM D648	165	°C
HDT	Unannealed 1.8MPa 6.4mm	ASTM D648	160	°C

Physical property	Condition	Standard	Value	Unit
Density		ASTM D792	1.48	g/cm <sup>3</sup>

Melt Index	190°C 2.16kg	ASTM D1238	15	g/10min
Shrinkage	Flow 3.2mm	ASTM D955	0.6~1.1	%
<b>Hardness</b>	<b>Condition</b>	<b>Standard</b>	<b>Value</b>	<b>Unit</b>
Rockwell Hardness	R(Scale)	ASTM D785	83	
<b>Flammability</b>	<b>Condition</b>	<b>Standard</b>	<b>Value</b>	<b>Unit</b>
Flame Rating	All Color 0.75mm	UL94	HB	
Flame Rating	All Color 1.5mm	UL94	HB	
Flame Rating	All Color 3.0mm	UL94	HB	