



HiPrene® M560

Polypropylene Resin

Product Description

HiPrene® M560 is a high melt flow, impact modified polypropylene suitable for injection molding. This material has good flowability and is easy to process. Because of its good flowability and impact resistance, it is suitable for home appliance components and battery cases.

Product Characteristic

Test Method Used	ASTM	
Features	Good Flowability	Good Impact Resistance
Typical Customer Applications	Home Appliance Component / Battery Case	

Typical Properties

Physical	Test Method	Unit	Value
Melt Mass-Flow Rate @ 23°C, 2.16kg	ASTM D1238	g/10min	27
Density	ASTM D792	g/cm ³	0.90
Mechanical	Test Method	Unit	Value
Tensile strength @ Yield	ASTM D638	MPa	30
Elongation at break	ASTM D638	%	>200
Flexural Modulus	ASTM D790	MPa	1600
Rockwell Hardness	ASTM D785	R scale	95
Impact	Test Method	Unit	Value
Izod Impact Strength @ 23°C, notched	ASTM D256	J/m	60
Izod Impact Strength @ -10°C, notched	ASTM D256	J/m	30
Thermal	Test Method	Unit	Value
Heat Deflection Temp. (HDT) @ 0,45 MPa	ASTM D648	°C	125

Notes: Typical properties; not to be constructed as specification

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Product Characteristic

Test Method Used	ISO
Features	Good Flowability Good Impact Resistance
Typical Customer Applications	Home Appliance Component / Battery Case

Typical Properties

Physical	Test Method	Unit	Value
Melt Mass-Flow Rate @ 23°C, 2.16kg	ISO 1133	g/10min	27
Density	ISO 1183	g/cm ³	0.90
Mechanical	Test Method	Unit	Value
Tensile strength @ Yield	ISO 527	MPa	28
Tensile Elongation @ 23°C	ISO 527	%	>200
Flexural Modulus @23°C	ISO 178	MPa	1500
Rockwell Hardness	ISO 2039	R scale	95
Impact	Test Method	Unit	Value
Izod Impact Strength @ 23°C, notched	ISO 180	kJ/m ²	5.0
Izod Impact Strength @ -10°C, notched	ISO 180	kJ/m ²	3.0
Thermal	Test Method	Unit	Value
Heat Deflection Temp. (HDT) @ 0,45 MPa	ISO 75	°C	105

Notes: Typical properties; not to be constructed as specification

Processing Recommendations

The actual conditions depends on the type of equipment used.

Injection Molding

HiPrene M560 is easy to process with standard injection molding machines. Following molding parameters should be used as guidelines:

Rear Temperature	180 – 190 °C
Middle Temperature	190 – 200 °C
Front Temperature	200 – 210 °C
Nozzle Temperature	200 – 210 °C
Mold Temperature	40 – 50 °C
Injection speed	20 – 40 mm/s
Injection pressure	20 – 40 MPa
Back Pressure	5 – 10 MPa
Dwell Time	20 – 30 s

Storage

This material should be stored in dry conditions, protected from sunlight and at temperatures below 50 °C.

Contact

GS Caltex Corporation

GS Tower, 508 Nonhyeon-ro, Gangnam-gu, Seoul
Republic of Korea
tel.: 82 042 866 1703; 82 042 866 1884