



HiPrene® M580

Polypropylene Resin

Product Description

HiPrene® M580 is a high melt flow, impact modified polypropylene suitable for injection molding. This material has excellent impact resistance. Because of its good impact resistance and flowability, it is suitable for home appliance components and battery cases.

Product Characteristic

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

Typical Properties

Physical	Test Method	Unit	Value
Melt Index @ 230°C, 2.16kg	ASTM D1238	g/10min	60
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	%	>150
Flexural Modulus	ASTM D790	MPa	1550
Rockwell Hardness	ASTM D785	R scale	95
Impact	Test Method	Unit	Value
Izod Impact Strength @ 23°C, notched	ASTM D256	J/m	50
Izod Impact Strength @ -10°C, notched	ASTM D256	J/m	25
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	Excellent Impact Resistance	Excellent Flowability
Typical Customer Applications	Home Appliance Component / Battery Case	

Typical Properties

Physical	Test Method	Unit	Value
Melt Index @ 230°C, 2.16kg	ISO 1133	g/10min	60
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	%	>150
Flexural Modulus @23°C	ISO 178	MPa	1450
Rockwell Hardness	ISO 2039	R scale	95
Impact	Test Method	Unit	Value
Izod Impact Strength @ 23°C, notched	ISO 180	kJ/m ²	4.5
Izod Impact Strength @ -10°C, notched	ISO 180	kJ/m ²	2.0
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 M580 is easy to process with standard injection molding machines. Following molding parameters should be used as guidelines:

Rear Temperature	200 – 220 °C
Middle Temperature	210 – 230 °C
Front Temperature	220 – 240 °C
Nozzle Temperature	220 – 240 °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

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