

HiPrene® H550

Polypropylene Resin

Product Description

HiPrene® H550 is a polypropylene homopolymer suitable for injection moulding. This material has excellent stiffness. Because of its good stiffness and thermal stability, it is suitable for household goods applications.

Product Characteristic

Test Method Used	ASTM	
Features	Excellent Stiffness	Good Thermal Stability
Typical Customer Applications	Household Goods	

Typical Properties

Physical	Test Method	Unit	Value
Melt Index @ 230°C, 2.16kg	ASTM D1238	g/10min	11
Density	ASTM D792	g/cm ³	0.90
Mechanical	Test Method	Unit	Value
Tensile strength @ Yield	ASTM D638	MPa	37
Elongation at break	ASTM D638	%	>500
Flexural Modulus	ASTM D790	MPa	1600
Rockwell Hardness	ASTM D785	R scale	105
Impact	Test Method	Unit	Value
Izod Impact Strength @ 23°C, notched	ASTM D256	J/m	35
Thermal	Test Method	Unit	Value
Heat Deflection Temp. (HDT) @ 0,45 MPa	ASTM D648	°C	115

Notes: Typical properties; not to be constructed as specification

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Product Characteristic

Test Method Used	ISO	
Features	Excellent Stiffness	Good Thermal Stability
Typical Customer Applications	Household Goods	

Typical Properties

Physical	Test Method	Unit	Value
Melt Index @ 230°C, 2.16kg	ISO 1133	g/10min	11
Density	ISO 1183	g/cm ³	0.90
Mechanical	Test Method	Unit	Value
Tensile strength @ Yield	ISO 527	MPa	35
Tensile Elongation @ 23°C	ISO 527	%	>500
Flexural Modulus @23°C	ISO 178	MPa	1550
Rockwell Hardness	ISO 2039	R scale	105
Impact	Test Method	Unit	Value
Izod Impact Strength @ 23°C, notched	ISO 180	kJ/m ²	3.5
Thermal	Test Method	Unit	Value
Heat Deflection Temp. (HDT) @ 0,45 MPa	ISO 75	°C	90

Notes: Typical properties; not to be constructed as specification

Processing Recommendations

The actual conditions depends on the type of equipment used.

Injection Molding

HiPrene H550 is easy to process with standard injection molding machines. Following molding parameters should be used as guidelines:

Rear Temperature	190 – 210 °C
Middle Temperature	200 – 220 °C
Front Temperature	200 – 220 °C
Nozzle Temperature	200 – 220 °C
Mold Temperature	25 – 50 °C
Injection speed	10 – 60 %
Injection pressure	20 – 70 MPa
Back Pressure	3 – 10 MPa
Dwell Time	20 – 40 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